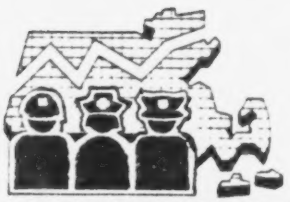
OCCUPATIONAL PROFILE OF SELECTED MANUFACTURING INDUSTRIES IN MASSACHUSETTS 1977



OCCUPATION/INDUSTRY RESEARCH PUBLICATION

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Job Market Research Service ● Massachusetts Division of Employment Security

AN OCCUPATIONAL PROFILE
OF
SELECTED MANUFACTURING INDUSTRIES
IN
MASSACHUSETTS
1977

Report Number 8

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INTRODUCTION

The Occupational Employment Statistics Program is part of a Federal-State cooperative program involving State Employment Security Agencies as well as the Employment and Training Administration and Bureau of Labor Statistics. It was designed to meet the needs of economists, employment specialists, educators and others for current data on employment by occupations and projected data on employment by occupation and industry. The information obtained from this program will be used as input in constructing industry-occupation matrices that will provide the data base for projecting future manpower requirements, emphasized in the Comprehensive Employment and Training Act of 1973 and other employment and educational legislation.

This publication is the eighth in a series of planned documents on current occupational profiles of Massachusetts industries. Other occupational reports available from this division are listed on the last page.

Currently a new survey is being conducted for non-manufacturing industries, and plans call for updating all industry groups triennialy, as well as including education.

METHODOLOGY

The Sample

The second quarter 1976 report (ES-202) of employment and wages covered by the Massachusetts Employment Security Law was used as a sampling frame for the Occupational Employment Statistics survey.

The sampling frame was stratified by three-digit SIC's (Standard Industrial Classification) and by nine employment size classes. Establishments with less than four employees were excluded from the sample, and all units with employment of two hundred and fifty or more were automatically included. All other establishments were subject to sample selection on a random basis, with the units in larger size classes having a proportionately higher chance of selection. Each unit was given a weight according to the proportion of firms selected in each size class. The sample included 5,115 establishments with bench mark employment of 559,244.

The Survey and Response

After the initial mailing, two follow-ups were sent to nonrespondents. Telephone calls and personal visits were made to nonrespondents where the data was critical for calculating valid estimates. Of the 5,115 establishments in the survey, replies were received from 3,150, a response rate of 62 percent, with total employment of 315,807.

The Estimating Procedures

All useable questionnaires were stratified into seven size groups, by industry. Reported total employment and occupational employment on each questionnaire was multiplied by the weight assigned during sample selection. These industry data were then divided into the employment in the ES 202 report (stratified by corresponding cells) for the reference month of the survey. The result produced by this procedure is known as the benchmark factor. This factor was then applied to the occupation data, thus accounting for nonresponse. These occupational estimates were then summed across size classes in industry totals.

Sampling Error

Sampling error is a arithmetic measure of the precision of an estimate. It is the difference between the estimate computed from the sample and the result that would have been obtained if the same methods were used to collect identical information from the universe. The relative errors listed in this report are the sampling errors of each occupation expressed as a percent of that occupational estimate. The relative errors shown are such that the chances are 2 out of 3 that the results of a comparable full scale data collection, using the same survey approach, would not differ by more than the percent shown; the chances are 19 out of 20 that the results of a full scale data collection would not differ by more than twice the percent shown. For example, it is estimated in this report that there are 300 Back Tenders employed in SIC, 26 Paper and Allied Products, making up 1.02 percent of total workers in the industry. Thus the chances are about 68 out of 100 that the results of a comparable full scale data collection would differ by less than 15 (5 percent) from the 300 estimated; similarly the estimated 1.02 percent of total employment would differ by less than .05 percent of total employment.

Nonsampling Error

The results of this survey are subject to biases and other nonsampling errors. Although careful editing and screening steps were taken, responding establishments may account for some errors in computations and processing, as well as placing workers in a wrong occupation. The nonrespondents are a source of nonsampling error for which measures were not available but are reflected in the estimating procedure.

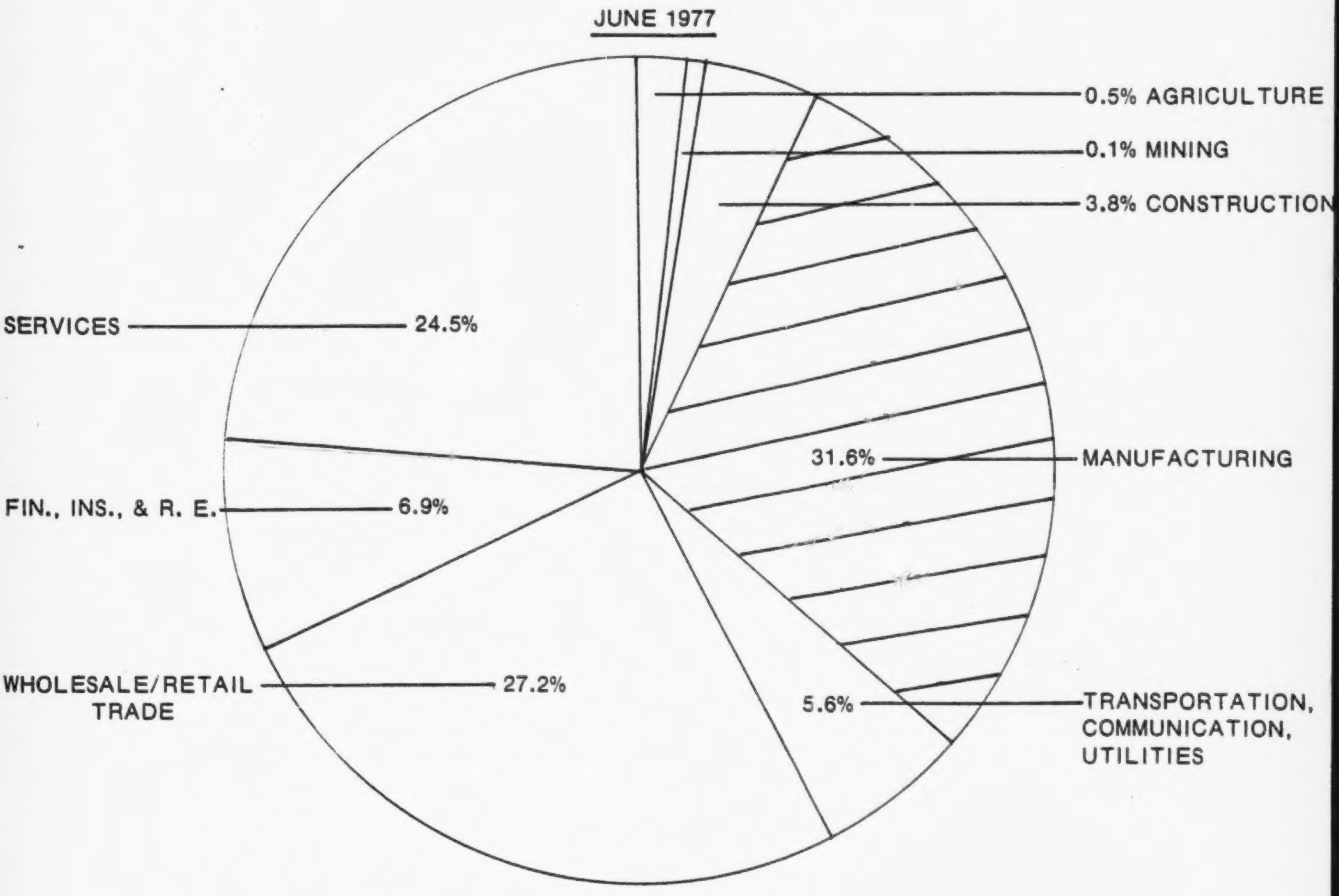
SCOPE OF SURVEY

This survey covered all Standard Industrial Classifications in the Manufacturing Division of the 1972 Manual. For your convenience listed below are the two digit SIC Codes with their short titles.

SIC CODE	SHORT TITLES
20	Food and Kindred Products
21	Tobacco Manufactures
22	Textile Mill Products
23	Apparel and Other Textile Products
24	Lumber and Wood Products
25	Furniture and Fixtures
26	Paper and Allied Products
27	Printing and Publishing
28	Chemicals and Allied Products
29	Petroleum and Coal Products
31	Leather and Leather Products
32	Stone, Clay, and Glass Products
33	Primary Metal Products
34	Fabricated Metal, Metal Products
35	Machinery, Except Electrical
36	Electrical Equipment and Supplies
37	Transportation Equipment
38	Instruments and Related Products
39	Miscellaneous Manufacturing Products

Based on 1972 SIC CODES

MANUFACTURING - SHARE OF COVERED EMPLOYMENT



INDUSTRY	JUNE 1977 EMPLOYMENT	PERCENT TOTAL
Agriculture	10,829	0.5
Mining	985	0.1
Construction	75,640	3.8
Manufacturing	628,672	31.6
Trans., Comm., Util.	111,024	5.6
Wholesale/Retail Trade	538,587	27.1
Fin., Ins., Real Estate	137,181	6.9
Services	487,806	24.5
Total	1,990,724	100.0

MANUFACTURING
Employment Trends 1974-1977

SIC 1/	Reference Month	1974	1975	1976	1977
20	June	29,839	28,612	30,191	29,494
21	April	116	71	66	26
22	April	30,559	24,680	28,404	27,716
23	May	44,045	40,343	44,704	43,386
24	May	5,149	4,101	4,737	5,275
25	June	9,769	8,400	8,535	8,277
26	April	33,328	27,104	28,902	29,403
27	May	43,593	40,444	41,198	41,293
28	June	20,831	19,277	18,738	18,550
29	May	1,135	1,147	1,147	1,273
30	June	34,008	26,978	28,801	29,710
31	May	25,077	23,219	25,495	23,394
32	May	14,161	10,870	11,333	11,274
33	April	15,283	13,142	13,316	14,727
34	June	58,473	46,864	50,375	51,231
35	June	77,624	74,442	75,690	83,445
36	June	104,783	84,785	88,088	94,386
37	June	27,811	29,658	31,161	35,430
38	June	46,587	44,055	44,918	50,904
39	May	27,463	23,519	23,999	25,192
TOTAL		649,634	571,711	599,698	624,386

1/ 1972 SIC CODES

MANUFACTURING
Distribution of Establishments and Employment, by 2 Digit SIC
March, 1977

			Size Groups ø															
			1		2		3		4		5		6		7		8		9	
SIC	No. Firms	Total Employ.	No. Firms	Emp.	No. Firms	Emp.	No. Firms	Emp.	No. Firms	Emp.	No. Firms	Emp.	No. Firms	Emp.	No. Firms	Emp.	No. Firms	Emp.	No. Firms	Emp.
20	583	28,442	127	155	101	631	100	1,367	119	3,711	62	4,478	51	7,381	15	475	8	5,967		
21	4	26	2	0	0	0	2	26												
22	332	27,910	59	76	45	287	38	536	78	2,464	43	3,059	45	7,881	13	4,751	10	6,880	1	1,976
23	753	42,451	133	167	98	594	113	1,616	175	5,628	116	8,072	89	13,121	21	7,405	7	4,549	1	1,299
24	366	4,776	158	200	83	531	61	824	43	1,217	16	1,059	4	587	1	358				
25	338	7,872	106	143	66	385	69	960	54	1,680	25	1,737	16	2,446	2	521				
26	323	29,386	25	37	41	238	51	680	57	1,787	61	4,171	63	10,270	17	5,386	7	4,453	1	2,364
27	1,433	41,672	472	719	367	2,235	250	3,408	190	5,608	73	5,039	55	8,494	13	4,449	10	6,722	3	4,998
28	367	19,485	87	118	88	540	53	715	69	2,124	32	2,154	19	2,653	11	3,548	6	3,808	2	3,825
29	40	1,168	9	19	13	77	5	63	6	178	4	269	3	562						
30	443	29,199	68	81	65	419	76	1,052	108	3,600	65	4,603	39	6,221	13	4,018	5	3,677	4	5,528
31	345	22,893	71	97	64	410	47	632	61	1,925	36	2,532	39	6,297	24	8,263	2	1,671	1	1,066
32	307	10,513	110	154	80	520	51	684	31	983	15	1,193	14	1,941	4	1,170	0	0	1	3,868
33	265	14,458	50	60	35	237	44	589	60	1,907	38	2,638	23	3,572	14	4,853	1	602		
34	1,089	50,762	232	302	218	1,405	212	2,892	243	7,880	98	6,755	52	7,897	20	6,867	11	6,781	3	7,983
35	1,530	79,307	410	648	391	2,373	282	3,882	232	7,120	98	6,865	54	8,245	30	10,516	18	12,987	15	26,671
36	665	91,542	136	163	102	658	81	1,115	125	4,056	82	5,909	71	11,061	33	11,744	19	11,906	16	44,930
37	156	33,560	44	61	29	169	17	257	29	883	16	1,147	8	1,143	5	1,798	1	529	7	27,573
38	444	48,965	107	128	82	524	71	996	75	2,339	37	2,692	31	4,946	21	7,786	13	8,829	7	20,725
39	549	25,137	169	232	144	873	75	1,068	69	2,328	50	3,485	25	4,324	5	1,547	8	5,331	4	5,949
20-39	10,332	609,524	2,575	3,560	2,112	13,106	1,698	23,362	1,824	57,418	968	67,857	701	109,042	262	89,732	126	86,692	66	158,755

ø SIZE GROUP	NO. EMPLOYEES	
1	0-	3
2	4-	9
3	10-	19
4	20-	49
5	50-	99
6	100-	249
7	250-	499
8	500-	999
9	1000 +	

OCCUPATIONS OF EMPLOYEES
FOOD AND KINDRED PRODUCTS (SIC 20)

Reference Date June 1977

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	2,400	8.12	5
Professional Occupations	630	2.13	N/A
Engineers	70	0.24	N/A
Chemist	80	0.27	30
Purchasing Agent/Buyer	100	0.34	14
Accountants/Auditors	280	0.95	10
All Other Professional Workers	100	0.34	N/A
Technical Occupations	230	0.78	N/A
Biological Science Technician	160	0.54	35
All Other Technical Workers	70	0.24	N/A
Service Occupations	1,180	3.99	N/A
Janitors, Porters, and Cleaners	980	3.32	9
All Other Service Workers	200	0.68	N/A
Maintenance and Production Occupations	19,500	66.01	N/A
Supervisor, Nonworking	990	3.35	12
Mechanic, Automotive	400	1.35	14
Mechanic, Maintenance	450	1.52	11
Vending Machine Service/Repairer	70	0.24	23
All Other Mechanics and Repairers	30	0.10	N/A
Truck Driver	790	2.67	9
Cook or Cooker Operator	280	0.95	13
Delivery/Route Worker	2,770	9.38	9
Electrician	130	0.44	24
Industrial Truck Operator	600	2.03	18
Inspector	100	0.34	20
Machinist	90	0.30	16
Maintenance Repairer, General Utility	720	2.44	17
Helper, Trades	70	0.24	13
Mixer	510	1.73	12
Order Filler	620	2.10	17
Oven Operator	150	0.51	11
Production Packager	4,430	15.00	8
Stationary Boiler Firer	20	0.07	33
Baker	210	0.71	18
Baker Helper	330	1.12	17
Boner, Meat	110	0.37	29
Casing Finisher	290	0.98	11
Cooler Room Worker, Meat	10	0.03	29
Dairy Processing Equipment Operator	360	1.22	14
Dividing Machine Operator	130	0.44	16
Flavor Room Worker	130	0.44	33
Ingredient Scaler	60	0.20	16
Meat Grinder	100	0.34	16

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Skin Peeling Machine Operator	30	0.10	23
Smoker	40	0.14	12
Tester	130	0.44	15
Cutting Machine Operator, Food	300	1.02	18
Fish Cleaner/Butcher	620	2.10	25
Cannery Worker	440	1.49	20
Food Shaper, Hand	120	0.41	31
Depositor,Food	100	0.34	18
Washer/Separator, Food	70	0.24	34
Grader, Food/Skins	30	0.10	27
All Other Skilled Workers	360	1.22	N/A
All Other Semiskilled Workers	960	3.25	N/A
All Other Laborers	1,280	4.33	N/A
Clerical Occupations	3,610	12.22	N/A
Computer Operator	40	0.14	8
Keypunch Operator	60	0.20	17
Accounting Clerk	360	1.22	9
Bookkeeper, Hand	260	0.88	18
General Clerk, Office	1,010	3.42	5
Order Clerk	120	0.41	14
Secretary	430	1.46	13
Switchboard Operator	10	0.03	33
Typist	20	0.07	23
All Other Office Clerical Workers	110	0.37	N/A
Shipping Packer	510	1.73	15
Shipping/Receiving Clerk	430	1.46	11
Weigher, Record Keeping	40	0.14	31
Stock Clerk	190	0.64	22
All Other Plant Clerical Workers	20	0.07	N/A
Sales Occupations	1,990	6.74	N/A
Sales Representatives	960	3.25	11
Sales Clerk	1,030	3.49	14
TOTAL	29,540	100.00	N/A

N/A Relative Error Not Available

Note: May not add to totals due to rounding.

RANKED OCCUPATIONAL EMPLOYMENT IN FOOD AND KINDRED PRODUCTS INDUSTRY

SIC 20

	OCCUPATION	EMPLOYMENT
1.	Production Packager	4,430
2.	Delivery/Route Worker	2,770
3.	Managers and Officers	2,400
4.	All Other Unskilled Workers	1,280
5.	Sales Clerk	1,030
6.	General Clerk, Office	1,010
7.	Supervisor, Nonworking	990
8.	Janitors, Porters, and Cleaners	980
9.	Sales Representative	960
10.	All Other Semiskilled Workers	960
		16,810

These 10 occupations make up 57% of total industry employment.

OCCUPATIONS OF EMPLOYEES
MEAT PRODUCTS (SIC 201)

Reference Date June 1977

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	150	5.54	6
Professional Occupations	20	0.74	N/A
Technical Occupations	10	0.37	N/A
Service Occupations	40	1.48	N/A
Maintenance and Production Occupations	2,100	77.49	N/A
Supervisor, Nonworking	110	4.06	5
Mechanic, Maintenance	30	1.11	14
Truck Driver	60	2.21	26
Cook/Cooker	20	0.74	27
Delivery and Route Worker	130	4.80	15
Industrial Truck Operator	20	0.74	18
Maintenance Repairer, General Utility	30	1.11	18
Mixer	30	1.11	14
Order Filler	80	2.95	15
Production Packager	450	16.61	16
Boner, Meat	110	4.06	29
Casing Finisher	290	10.70	11
Cooler Room Worker, Meat	10	0.37	29
Meat Grinder	100	3.69	16
Pumper	70	2.58	17
Skin Peeling Machine Operator	30	1.11	23
Smoker	40	1.48	12
Cutting Machine Operator, Food	20	0.74	35
All Other Semiskilled Workers	390	14.39	N/A
All Other Unskilled Workers	80	2.95	N/A
Clerical Occupations	260	9.59	N/A
Accounting Clerk	30	1.11	11
Bookkeeper, Hand	40	1.48	11
General Clerk	70	2.58	14
Secretary	10	0.37	22
Shipping/Packer	80	2.95	15
Shipping/Receiving Clerk	30	1.11	12
Sales Occupations	130	4.80	N/A
TOTAL	2,710	100.00	N/A

N/A Relative Error Not Available

Note: May not add to totals due to rounding.

OCCUPATIONS OF EMPLOYEES
DAIRY PRODUCTS (SIC 202)

Reference Date June 1977

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	790	14.21	13
Professional Occupations	110	1.98	N/A
Engineers	10	0.18	N/A
Accountants/Auditors	60	1.08	10
All Other Professional Workers	40	0.72	N/A
Technical Occupations	170	3.06	N/A
Biological Science Technician	120	2.16	47
All Other Technicians	50	0.90	N/A
Service Occupations	200	3.60	N/A
Maintenance and Production Occupations	3,110	55.94	N/A
Supervisor, Nonworking	140	2.52	11
Mechanic, Automotive	200	3.60	23
Truck Driver	190	3.42	25
Delivery and Route Workers	880	15.83	17
Maintenance Repairer, General Utility	120	2.16	32
Production Packager	300	5.40	19
Dairy Processing Equipment Operator	360	6.47	14
Flavor Room Worker	130	2.34	33
Tester	50	0.90	24
All Other Skilled Workers	90	1.62	N/A
All Other Semiskilled Workers	610	10.97	N/A
All Other Unskilled Workers	40	0.72	N/A
Clerical Occupations	860	15.47	N/A
Computer Operator	30	0.54	1
Accounting Clerk	100	1.80	22
General Clerk	310	5.58	8
Secretary	170	3.06	28
All Other Office Clerical Workers	130	2.34	N/A
Shipping/Receiving Clerk	120	2.16	23
Sales Occupations	320	5.76	N/A
TOTAL	5,560	100.00	N/A

N/A Relative Error Not Available
Note: May not add to totals due to rounding

OCCUPATIONS OF EMPLOYEES
BAKERY PRODUCTS (SIC 205)

Reference Date June 1977

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	280	4.43	6
Professional Occupations	30	0.47	N/A
Service Occupations	390	6.17	N/A
Janitors, Porters, and Cleaners	370	5.85	7
All Other Service Workers	20	0.32	N/A
Maintenance and Production Occupations	4,020	63.61	N/A
Supervisor, Nonworking	180	2.85	20
Mechanic, Automotive	70	1.11	29
Mechanic, Maintenance	120	1.90	30
Truck Driver	180	2.85	15
Delivery and Route Workers	860	13.61	21
Maintenance Repairer, General Utility	90	1.42	25
Mixer	200	3.16	15
Order Filler	200	3.16	34
Oven Operator	150	2.37	11
Production Packager	740	11.71	17
Baker	210	3.32	18
Baker Helper	330	5.22	17
Dividing Machine Operator	130	2.06	16
Ingredient Scaler	60	0.95	16
Cutting Machine Operator, Food	90	1.42	28
Food Shaper, Hand	110	1.74	34
Depositor, Food	60	0.95	24
All Other Skilled Workers	90	1.42	N/A
All Other Semiskilled Workers	60	0.95	N/A
All Other Skilled Workers	90	1.42	N/A
Clerical Occupations	700	11.08	N/A
General Clerk	270	4.27	9
Secretary	30	0.47	20
Shipping Packer	300	4.75	21
Shipping/Receiving Clerk	100	1.58	32
Sales Occupations	900	14.24	N/A
Sales Representatives	150	2.37	35
Sales Clerk	750	11.87	16
TOTAL	6,320	100.00	N/A

N/A Relative Error Not Available
Note: May not add to totals due to rounding.

OCCUPATIONS OF EMPLOYEES
BEVERAGES (SIC 208)

Reference Date June 1977

OCCUPATION	EMPLOYMENT Number	EMPLOYMENT Percent	EMPLOYMENT Relative Error Percent
Managers and Officers	270	8.77	10
Professional Occupations	30	0.97	N/A
Accountants and Auditors	20	0.65	15
All Other Professional Workers	10	0.32	N/A
Technical Occupations	20	0.65	N/A
Service Occupations	60	1.95	N/A
Janitors, Porters, & Cleaners	40	1.30	12
All Other Service Workers	20	0.65	N/A
Maintenance and Production Occupations	2,120	68.83	N/A
Supervisor, Nonworking	140	4.55	16
Mechanic, Automotive	60	1.95	14
Mechanic, Maintenance	20	0.65	30
Vending Machine Servicer/Repairer	70	2.27	23
Truck Driver	40	1.30	26
Delivery and Route Workers	700	22.73	11
Industrial Truck Operator	110	3.57	11
Inspector	30	0.97	33
Maintenance Repairer, General Utility	30	0.97	18
Mixer	40	1.30	19
Order Filler	40	1.30	29
Production Packager	440	14.29	9
Tester	30	0.97	25
All Other Skilled Workers	40	1.30	N/A
All Other Semiskilled Workers	10	0.32	N/A
All Other Unskilled Workers	320	10.39	N/A
Clerical Occupations	370	12.01	N/A
Keypunch Operator	20	0.65	28
Accounting Clerk	60	1.95	13
Bookkeeper, Hand	20	0.65	27
General Clerk	120	3.90	12
Secretary	20	0.65	20
Typist	20	0.65	23
All Other Office Clerical Workers	40	1.30	N/A
Shipping/Receiving Clerk	60	1.95	20
All Other Plant Clerical Workers	10	0.32	N/A
Sales Occupations	210	6.82	N/A
Sales Representatives	200	6.49	21
All Other Sales Workers	10	0.32	N/A
TOTAL	3,080	100.00	N/A

N/A Relative Error Not Available   Note: May not add to totals due to rounding.

OCCUPATIONS OF EMPLOYEES
MISC. FOODS & KINDRED PRODUCTS (SIC 209)

Reference Date June 1977

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	400	7.81	4
Professional Occupations	180	3.52	N/A
Engineers	10	0.20	N/A
Chemist	30	0.59	18
Purchasing Agent/Buyer	50	0.98	14
Accountants/Auditors	60	1.17	12
All Other Professional Workers	30	0.59	N/A
Technical Occupations	30	0.59	N/A
Biological Science Technicians	20	0.39	22
All Other Technicians	10	0.20	N/A
Service Occupations	140	2.73	N/A
Maintenance and Production Occupations	3,630	70.90	N/A
Supervisor, Nonworking	120	2.34	7
Mechanic, Maintenance	40	0.78	25
Truck Driver	150	2.93	24
Cook/Cooker	80	1.56	25
Delivery and Route Workers	130	2.54	23
Industrial Truck Operator	70	1.37	12
Inspector	40	0.78	23
Machinist	50	0.98	22
Maintenance Repairer, General Utility	110	2.15	10
Helper, Trades	60	1.17	6
Mixer	100	1.95	27
Order Filler	40	0.78	33
Production Packager	1,330	25.98	8
Drier Operators	40	0.78	40
Tester	10	0.20	47
Cutting Machine Operator, Food	120	2.34	12
Fish Cleaner/Butcher	620	12.11	25
Depositor, Food	40	0.78	29
All Other Skilled Workers	50	0.98	N/A
All Other Semiskilled Workers	270	5.27	N/A
All Other Unskilled Workers	160	3.13	N/A
Clerical Occupations	580	11.33	N/A
Accounting Clerk	60	1.17	9
Bookkeeper, Hand	60	1.17	16
General Clerk	80	1.56	13
Order Clerk	40	0.78	17
Secretary	100	1.95	14
All Other Office Clerical Workers	70	1.37	N/A
Shipping Packer	30	0.59	29

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Shipping/Receiving Clerk	90	1.76	19
Stock Clerk, Storeroom	30	0.59	23
All Other Plant Clerical Workers	20	0.39	N/A
Sales Occupations	160	3.13	N/A
Sales Representatives	150	2.93	21
All Other Sales Workers	10	0.20	N/A
TOTAL	5,120	100.00	N/A

N/A Relative Error Not Available

Note: May not add to totals due to rounding.

OCCUPATIONS OF EMPLOYEES
TEXTILE MILL PRODUCTS (SIC 22)

Reference Date April 1977

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	1,290	4.66	7
Professional Occupations	770	2.78	N/A
Industrial Engineer	60	0.22	15
Mechanical Engineer	50	0.18	11
All Other Engineers	40	0.14	12
Chemist	90	0.32	10
Life Scientist	20	0.07	N/A
Systems Analyst, EDP	50	0.18	31
Purchasing Agent/Buyer	70	0.25	11
Accountants/Auditors	130	0.47	10
Nurse, Professional	10	0.04	21
Personnel/Labor Relations Specialist	50	0.18	12
Designer	100	0.36	23
All Other Professional Workers	100	0.36	N/A
Technical Occupations	430	1.55	N/A
Computer Programmer	60	0.22	17
Engineering Technicians	60	0.22	13
Colorist	90	0.32	15
All Other Science Technicians	150	0.54	10
All Other Technicians	70	0.25	23
Service Occupations	510	1.84	N/A
Supervisor, Nonworking Service	50	0.18	30
Janitors, Porters, and Cleaners	290	1.05	7
Guards and Doorkeepers	110	0.40	18
All Other Service Workers	60	0.22	N/A
Maintenance and Production Occupations	21,000	75.81	N/A
Supervisor, Nonworking	1,010	3.65	5
Mechanic, Maintenance	260	0.94	13
Knitting Machine Fixer	160	0.58	14
Loom Fixer	460	1.66	15
Section Repairer and Setter	230	0.83	13
Mechanic, Sewing Machine	30	0.11	20
All Other Mechanics and Repairers	90	0.32	N/A
Presser, Machine	90	0.32	30
Truck Driver	100	0.36	11
Carpenter	60	0.22	7
Drawer-In, Hand	60	0.22	19
Electrician	140	0.51	9
Industrial Truck Operator	220	0.79	9
Inspector	630	2.27	13
Instructor, Apparel & Textile Mfg.	10	0.04	13
Machinist	140	0.51	11

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Maintenance Repairer, General Utility	260	0.94	12
Helper, Trades	120	0.43	14
Millwright	90	0.32	20
Oiler	70	0.25	17
Order Filler	270	0.97	15
Painter, Maintenance	30	0.11	18
Plumber/Pipefitter	50	0.18	9
Production Packager	630	2.27	15
Sewing Machine Operator, Regular Equipment, Garment	530	1.91	29
Sewing Machine Operator, Special Equipment, Garment	100	0.36	21
Spooler Operator, Automatic	50	0.18	21
Stationary Boiler Firer	100	0.36	14
Stationary Engineer	20	0.07	16
Welders/Flamecutters	20	0.07	18
Weaver	830	3.00	12
Ager Operator	60	0.22	25
Battery Loader	160	0.58	32
Beam-Dyer Operator	90	0.32	31
Beam-Warper Tender	100	0.36	19
Bleach-Range Operator	50	0.18	22
Blending-Machine Operator	160	0.58	16
Bobbin Sorter	50	0.18	24
Bobbin Winders, Machine	130	0.47	21
Braiding Machine Operator	200	0.72	11
Burler	40	0.14	33
Calender Operator, Cloth Press	130	0.47	20
Card Grinder	20	0.07	30
Card Tender	560	2.02	13
Drawing-Frame Tender	120	0.43	23
Cloth Feeder	190	0.69	20
Finishing-Range Tender	190	0.69	14
Finishing-Range Operator	130	0.47	34
Cloth Printer	70	0.25	33
Cloth Trimmer, Machine	70	0.25	27
Cloth or Carpet Winder	100	0.36	19
Coating Machine Operator	300	1.08	20
Creeler, Yarn	120	0.43	22
Cutter, Portable Machine	90	0.32	24
Doffer	290	1.05	13
Drawing-In-Machine Tender	20	0.07	21
Dresser Tender	50	0.18	20
Dye-Range Operator	190	0.69	32
Dye-Reel Operator	230	0.83	28
Dye-Tank Tender	70	0.25	1
Fuller, Textile	120	0.43	33
Harness Builder/Loom Changer	120	0.43	25
Knitting Machine Operator	400	1.44	22
Laminating Machine Operator	100	0.36	35
Loom-Winder Tender	140	0.51	24

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Mender, Cloth	190	0.69	24
Mercerizer Operator	80	0.29	22
Napper Tender	70	0.25	14
Picker Tender	100	0.36	20
Rubber-Covering-Machine Operator	40	0.14	22
Slasher Tender	100	0.36	24
Smash Hand	90	0.32	21
Spinner, Frame	550	1.99	15
Tenter-Frame Operator	280	1.01	10
Tester	120	0.43	16
Twister Tender	230	0.83	16
Warp-Tying-Machine Tender	80	0.29	17
Winder Operator, Automotive	310	1.12	11
Yarn Winder	290	1.05	31
Cloth Grader	290	1.05	17
Drier Operator, Textile	250	0.90	23
Screen/Stencil Printer/Setter	130	0.47	12
Mixer/Blender, Chemical	230	0.83	16
All Other Skilled Workers	410	1.48	19
All Other Semi-skilled Workers	3,350	12.09	N/A
All Other Unskilled Workers	2,090	7.55	N/A
Clerical Occupations	3,190	11.52	N/A
Clerical Supervisor	130	0.47	18
Bookkeeping/Billing Machine Operator	50	0.18	17
Computer Operator	60	0.22	15
Keypunch Operator	120	0.43	16
All Other Office Machine Operators	30	0.11	28
Stenographer	30	0.11	29
Accounting Clerk	180	0.65	18
Bookkeeper, Hand	70	0.25	12
File Clerk	60	0.22	21
General Clerk, Office	590	2.13	14
Order Clerk	150	0.54	21
Payroll/Timekeeping Clerk	150	0.54	7
Personnel Clerk	30	0.11	11
Procurement Clerk	40	0.14	16
Receptionist	10	0.04	32
Secretary	230	0.83	10
Statistical Clerk	60	0.22	23
Switchboard Operator	10	0.04	21
Switchboard Operator/Receptionist	50	0.18	10
Typist	100	0.36	23
All Other Office Clerical Workers	30	0.11	27
Production Clerk/Coordinator	160	0.58	15
Shipping Packer	380	1.37	11
Shipping/Receiving Clerk	240	0.87	11
Weigher, Record-Keeping	40	0.14	23
Stock Clerk	120	0.43	27
All Other Plant Clerical Workers	70	0.25	19

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Sales Occupations	510	1.84	N/A
Sales Representatives	380	1.37	17
All Other Sales Occupations	130	0.47	N/A
TOTAL	27,700	100.00	N/A

N/A Relative Error Not Available

Note: May not add to totals due to rounding.

RANKED OCCUPATIONAL EMPLOYMENT IN THE TEXTILE MILL PRODUCTS INDUSTRY

SIC 22

	OCCUPATION	EMPLOYMENT
1.	All Other Semiskilled Workers	3,350
2.	All Other Unskilled Workers	2,090
3.	Managers and Officers	1,290
4.	Supervisor, Nonworking	1,010
5.	Weaver	830
6.	Inspector	630
7.	Production Packager	630
8.	General Clerk	590
9.	Card Tender	560
10.	Spinner, Frame	550
		11,530

OCCUPATIONS OF EMPLOYEES
NARROW FABRIC MILLS (SIC 224)

Reference Date April 1977

OCCUPATION	EMPLOYMENT Number	EMPLOYMENT Percent	EMPLOYMENT Relative Error Percent
Managers and Officers	60	4.44	N/A
Professional Occupations	30	2.22	N/A
Engineers	10	0.74	N/A
All Other Professional Workers	20	1.48	N/A
Technical Occupations	20	1.48	N/A
Service Occupations	20	1.48	N/A
Maintenance and Production Occupations	1,080	80.00	N/A
Supervisor, Nonworking	40	2.96	2
Mechanic, Maintenance	10	0.74	18
Loom Fixer	20	1.48	21
All Other Mechanics, and Repairers	20	1.48	N/A
Inspector	30	2.22	9
Machinist	10	0.74	1
Maintenance Repairer, General Utility	20	1.48	9
Production Packager	10	0.74	7
Weaver	220	16.30	10
Beam-Warp Tenders	30	2.22	7
Bleach-Range Operator	10	0.74	1
Bobbin Winders, Machine	30	2.22	26
Braiding Machine Operator	130	9.63	1
Cloth or Carpet Winders	10	0.74	26
Doffer	60	4.44	21
Rubber-Covering Machine Operator	40	2.96	22
Tester	20	1.48	1
Winder Operator, Automatic	60	4.44	6
Mixer/Blender, Chemical	20	1.48	1
All Other Skilled Workers	60	4.44	N/A
All Other Semiskilled Workers	140	10.37	N/A
All Other Unskilled Workers	90	6.67	N/A
Clerical Occupations	120	8.89	N/A
General Clerk	30	2.22	8
Secretary	10	0.74	9
All Other Office Clerical Workers	40	2.96	N/A
Shipping Packer	20	1.48	15
Shipping/Receiving Clerk	10	0.74	11
All Other Plant Clerical Workers	10	0.74	N/A
Sales Occupations	20	1.48	21
TOTAL	1,350	100.00	N/A

N/A Relative Error Not Available

Note: May not add to totals due to rounding

OCCUPATIONS OF EMPLOYEES
KNITTING MILLS (SIC 225)

Reference Date April 1977

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	330	5.22	21
Professional Occupations	220	3.48	N/A
Industrial Engineer	10	0.16	23
Mechanical Engineer	10	0.16	13
All Other Engineers	10	0.16	38
Chemist	10	0.16	25
Purchasing Agent/Buyer	10	0.16	30
Accountants/Auditors	30	0.47	19
Personnel and Labor Relations Specialist	10	0.16	34
Designer	40	0.63	43
All Other Professional Workers	90	1.42	N/A
Technical Occupations	90	1.42	N/A
Computer Programmer	20	0.32	37
Engineering Technicians	20	0.32	8
Colorist	10	0.16	17
All Other Science Technicians	20	0.32	27
All Other Technicians	20	0.32	9
Service Occupations	160	2.53	N/A
Janitors, Porters, and Cleaners	80	1.27	15
Guards and Doorkeepers	30	0.47	20
Food Service Workers	10	0.16	21
All Other Service Workers	40	0.63	N/A
Maintenance and Production Occupations	4,410	69.78	N/A
Supervisor, Nonworking	210	3.32	6
Knitting Machine Fixer	150	2.37	14
Mechanic, Sewing Machine	10	0.16	19
All Other Mechanics and Repairers	70	1.11	N/A
Presser, Machine	60	0.95	37
Truck Driver	20	0.32	18
Carpenter	10	0.16	20
Electrician	20	0.32	9
Industrial Truck Operator	20	0.32	14
Inspector	130	2.06	17
Machinist	10	0.16	33
Maintenance Repairer, General Utility	30	0.47	33
Helper, Trades	40	0.63	4
Order Filler	110	1.74	22
Painter, Maintenance	10	0.16	34
Plumber/Pipefitter	10	0.16	7
Production Packager	160	2.53	32
Sewing Machine Operator Regular Equipment, Garment	530	8.39	29
Sewing Machine Operator Special Equipment, Garment	90	1.42	22
Blending Machine Operator	20	0.32	17
Card Tender	40	0.63	22

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Cloth Feeders	60	0.95	26
Cloth Trimmers, Machine	40	0.63	37
Coating Machine Operators	10	0.16	14
Cutter, Portable Machine	50	0.79	28
Hand Sewer	10	0.16	40
Knitting Machine Operators	350	5.54	24
Mender, Cloth	20	0.32	36
Tenter-Frame Operator	40	0.64	20
Tester	10	0.16	30
Cloth Grader	20	0.32	41
Folder, Hand	90	1.42	50
Mixer/Blender, Chemical	20	0.32	34
All Other Skilled Workers	230	3.64	N/A
All Other Semiskilled Workers	1,460	23.10	N/A
All Other Unskilled Workers	250	3.96	N/A
Clerical Occupations	930	14.72	N/A
Bookkeeping & Billing Machine Operator	10	0.16	23
Computer Operator	30	0.47	29
Keypunch Operator	70	1.11	26
Stenographer	10	0.16	26
Accounting Clerk	60	0.95	46
Bookkeeper, Hand	20	0.32	26
File Clerk	20	0.32	34
General Clerk	180	2.85	24
Payroll/Timekeeping Clerk	40	0.63	10
Personnel Clerk	10	0.16	19
Procurement Clerk	20	0.32	34
Secretary	30	0.47	22
Statistical Clerk	20	0.32	47
Switchboard Operator	10	0.16	39
Switchboard Operator/Receptionist	10	0.16	33
Typist	40	0.63	43
All Other Office Clerical Workers	90	1.42	N/A
Production Clerk	40	0.63	37
Shipping Packer	80	1.27	23
Shipping/Receiving Clerk	60	0.95	25
Weigher	10	0.16	33
All Other Plant Clerical Workers	70	1.11	N/A
Sales Occupations	180	2.85	N/A
Sales Representatives	90	1.42	45
All Other Sales Workers	90	1.42	N/A
TOTAL	6,320	100.00	N/A

N/A Relative Error Not Available

Note: May not add to totals due to rounding.

OCCUPATIONS OF EMPLOYEES
TEXTILE FINISHING, EXCEPT WOOL (SIC 226)

Reference Date April 1977

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	220	3.70	17
Professional Occupations	80	1.34	N/A
Engineers	30	0.50	N/A
Chemist	10	0.17	30
Purchasing Agent/Buyer	10	0.17	23
Accountants/Auditors	10	0.17	31
All Other Professional Workers	20	0.34	N/A
Technical Occupations	80	1.34	N/A
Colorist	50	0.84	16
All Other Technicians	30	0.50	N/A
Service Occupations	110	1.85	N/A
Janitors, Porters, and Cleaners	40	0.67	15
All Other Service Workers	70	1.18	N/A
Maintenance and Production Occupations	4,730	79.50	N/A
Supervisor, Nonworking	230	3.87	12
Mechanic,Maintenance	90	1.51	22
All Other Mechanics and Repairers	90	1.51	N/A
Truck Drivers	30	0.50	25
Carpenter	10	0.17	20
Electrician	30	0.50	21
Industrial Truck Operator	80	1.34	16
Inspector	200	3.36	29
Machinist	20	0.34	25
Maintenance Repairer, General Utility	70	1.18	25
Millwright	50	0.84	35
Oiler	10	0.17	28
Order Filler	100	1.68	30
Plumber/Pipefitter	20	0.34	22
Production Packager	200	3.36	31
Stationary Boiler Firer	50	0.84	18
Ager Operator	30	0.50	30
Bleach-Range Operator	40	0.67	28
Boil-Off Machine Operator, Cloth	20	0.34	35
Calender Operator	70	1.18	29
Cloth Feeder	80	1.34	31
Finishing-Range Tender	80	1.34	30
Dye-Reel Operator	190	3.19	32
Mercerizer Operators	40	0.67	34
Tenter-Frame Operator	180	3.03	14
Tester	20	0.34	23
Screen-Stencil Printer	30	0.50	35
Mixer/Blender,Chemical	70	1.18	29

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
All Other Skilled Workers	20	0.34	N/A
All Other Semiskilled Workers	2,210	37.14	N/A
All Other Unskilled Workers	370	6.22	N/A
Clerical Occupations	690	11.60	N/A
Clerical Supervisor	20	0.34	31
Bookkeeping/Billing Machine Operator	30	0.50	22
All Other Office Machine Operators	20	0.34	N/A
Accounting Clerk	30	0.50	26
Order Clerk	40	0.67	32
Payroll/Timekeeping Clerk	20	0.34	25
Secretary	20	0.34	23
Switchboard Operator/Receptionist	10	0.17	18
All Other Office Clerical Workers	240	4.03	N/A
Production Clerk	20	0.34	23
Shipping Packer	110	1.85	19
Shipping/Receiving Clerk	70	1.18	20
Stock Clerk, Storeroom	40	0.67	22
All Other Plant Clerical Workers	20	0.34	N/A
Sales Occupations	40	0.67	N/A
TOTAL	5,950	100.00	N/A

N/A Relative Error Not Available

Note: May not add to totals due to rounding.

OCCUPATIONS OF EMPLOYEES
YARN AND THREAD MILLS (SIC 228)

Reference Date April 1977

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	90	4.11	14
Professional Occupations	30	1.37	N/A
Technical Occupations	10	0.46	N/A
Service Occupations	20	0.91	N/A
Janitors, Porters, and Cleaners	10	0.46	40
All Other Service Occupations	10	0.46	N/A
Maintenance and Production Occupations	1,790	81.74	N/A
Supervisor, Nonworking	60	2.74	17
Mechanic, Maintenance	20	0.91	17
Section Repairer and Setter	30	1.37	28
All Other Mechanics and Repairers	30	1.37	N/A
Inspector	20	0.91	48
Maintenance Repairer, General Utility	30	1.37	33
Order Filler	20	0.91	15
Production Packager	70	3.20	11
Blending Machine Operator	20	0.91	37
Bobbin Winders, Machine	30	1.37	41
Card Tenders	140	6.39	17
Drawing-Frame Tenders	40	1.83	32
Doffer	20	0.91	1
Dye-Tank Tender	10	0.46	10
Mender, Cloth	20	0.91	10
Mercerizer Operator	20	0.91	10
Picker Tender	10	0.46	36
Skein-Yarn Dyer	20	0.91	1
Speeder Tender	30	1.37	41
Spinner, Frame	230	10.50	16
Twister Tender	110	5.02	8
Winder Operator,Automatic	200	9.13	12
Yarn Winder	90	4.11	27
Screen-Stencil Printer	20	0.91	8
All Other Skilled Workers	30	1.37	N/A
All Other Semiskilled Workers	360	16.44	N/A
All Other Unskilled Workers	110	5.02	N/A
Clerical Occupations	190	8.68	N/A
Keypunch Operator	10	0.46	4
Accounting Clerk	10	0.46	1
General Clerk	30	1.37	31
Payroll/Timekeeping Clerk	20	0.91	16
Secretary	10	0.46	30
All Other Office Clerical Workers	40	1.83	N/A
Shipping Packer	20	0.91	16
Shipping/Receiving Clerk	20	0.91	37

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Weigher	10	0.46	8
Stock Clerk, Storeroom	10	0.46	4
All Other Plant Clerical Workers	10	0.46	N/A
Sales Occupations	60	2.74	N/A
Sales Representatives	50	2.28	18
All Other Sales Workers	10	0.46	N/A
TOTAL	2,190	100.00	N/A

N/A Relative Error Not Available

Note. May not add to totals due to rounding.

OCCUPATIONS OF EMPLOYEES
MISC. TEXTILE GOODS (SIC 229)

Reference Date April 1977

OCCUPATION	EMPLOYMENT Number	 Percent	 Relative Error Percent
Managers and Officers	280	5.25	7
Professional Occupations	250	4.69	N/A
Industrial Engineer	20	0.38	28
Mechanical Engineer	20	0.38	21
All Other Engineers	10	0.19	13
Chemist	50	0.94	12
Life Scientist	20	0.38	1
Purchasing Agent/Buyer	30	0.56	19
Accountants/Auditors	50	0.94	12
Personnel and Labor Relations Specialist	10	0.19	9
All Other Professional Workers	40	0.75	N/A
Technical Occupations	180	3.38	N/A
Computer Programmer	20	0.38	24
Engineering Technicians	30	0.56	27
Science Technicians	80	1.50	15
All Other Technicians	50	0.94	N/A
Service Occupations	100	1.88	N/A
Janitors, Porters, Cleaners	60	1.13	7
Guards and Doorkeepers	30	0.56	31
All Other Service Workers	10	0.19	N/A
Maintenance & Production Occupations	3,710	69.61	N/A
Supervisor, Nonworking	180	3.38	12
Mechanic, Maintenance	70	1.31	15
Section Repairer and Setter	50	0.94	39
Truck Driver	30	0.56	17
Carpenter	10	0.19	12
Electrician	30	0.56	13
Industrial Truck Operator	40	0.75	15
Inspector	140	2.63	27
Machinist	50	0.94	15
Maintenance Repairer, General Utility	50	0.94	24
Helper, Trades	20	0.38	37
Millwright	20	0.38	31
Order Filler	10	0.19	34
Production Packager	130	2.44	31
Stationary Boiler Firer	20	0.38	25
Blending-Machine Operator	60	1.13	17
Bobbin Winders, Automatic	20	0.38	49
Braiding Machine Operator	60	1.13	36
Burler	20	0.38	49
Calender Operator, Cloth Pressing	30	0.56	35
Card Tenders	220	4.13	14

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Cloth Feeders	20	0.38	36
Finishing-Range Tender	70	1.31	19
Coating Machine Operator	130	2.44	23
Dye-Reel Operator	10	0.19	48
Fuller, Textile	90	1.69	46
Laminating Machine Operator	90	1.69	37
Picker Tender	60	1.13	31
Spinner, Frame	80	1.50	43
Tenter-Frame Operator	40	0.75	20
Tester	30	0.56	31
Twister Tender	40	0.75	49
Washer, Synthetic Fibers	20	0.38	48
Yarn Winder	20	0.38	41
Folding Machine Operator	20	0.38	43
Cutter,Machine	40	0.75	34
Drier Operator, Textile	150	2.81	29
Mixer/Blender, Chemical	90	1.69	26
All Other Skilled Workers	170	3.19	N/A
All Other Semiskilled Workers	740	13.88	N/A
All Other Unskilled Workers	540	10.13	N/A
Clerical Occupations	640	12.01	N/A
Clerical Supervisor	20	0.38	26
Computer Operator	10	0.19	19
Keypunch Operator	10	0.19	26
Accounting Clerk	70	1.31	26
Bookkeeper, Hand	10	0.19	18
General Clerk	70	1.31	16
Order Clerk	40	0.75	20
Payroll/Timekeeping Clerk	40	0.75	9
Procurement Clerk	20	0.38	28
Secretary	110	2.06	15
Statistical Clerk	20	0.38	29
Switchboard Operator/Receptionist	10	0.19	13
All Other Office Clerical Workers	40	0.75	N/A
Production Clerk	40	0.75	14
Shipping Packer	70	1.31	19
Shipping/Receiving Clerk	40	0.75	19
Stock Clerk, Storeroom	10	0.19	23
All Other Plant Clerical Workers	10	0.19	N/A
Sales Occupations	170	3.19	N/A
Sales Representatives	140	2.63	35
Sales Clerks	30	0.56	4
TOTAL	5,330	100.00	N/A

N/A Relative Error Not Available

Note: May not add to totals due to rounding.

OCCUPATIONS OF EMPLOYEES
MISC. APPAREL AND ACCESSORIES (SIC 238)

Reference Date May 1977

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	100	3.26	14
Professional Occupations	50	1.63	N/A
Service Occupations	60	1.95	N/A
Janitors, Porters, and Cleaners	30	0.98	24
All Other Service Workers	30	0.98	N/A
Maintenance and Production Occupations	2,430	79.15	N/A
Supervisor, Nonworking	60	1.95	15
Mechanic, Sewing Machine	20	0.65	24
Presser, Hand	40	1.30	29
Presser, Machine	100	3.26	27
Inspector	40	1.30	27
Sewing Machine Operator Regular Equipment Garment	1,210	39.41	8
Sewing Machine Operator Special Automatic Equip. Garment	150	4.89	22
Bundler	30	0.98	23
Cutter, Portable Machine	50	1.63	22
Die Cutter	20	0.65	32
Fusing Machine Operator	60	1.95	18
Shaper and Presser	20	0.65	31
Spreader	40	1.30	19
Thread	70	2.28	20
Work Distributor	20	0.65	23
Marker	10	0.33	31
Turner	40	1.30	33
Soaber Operator	20	0.65	22
All Other Semiskilled Workers	350	11.40	N/A
All Other Unskilled Workers	80	2.61	N/A
Clerical Occupations	370	12.05	N/A
Bookkeeper, Hand	20	0.65	21
General Clerk	50	1.63	22
Payroll/Timekeeping Clerk	20	0.65	21
All Other Office Clerical Workers	70	2.28	N/A
Production Clerk	20	0.65	33
Shipping/Receiving Clerk	30	0.98	20
Stock Clerk, Storeroom	20	0.65	23
Shade-Ticket Marker	50	1.63	8
All Other Plant Clerical Workers	90	2.93	N/A
Sales Occupations	60	1.95	N/A
TOTAL	3,070	100.00	N/A

N/A Relative Error Not Available

Note: May not add to totals due to rounding.

OCCUPATIONS OF EMPLOYEES
FURNITURE AND FIXTURES (SIC 25)

Reference Date June 1977

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	500	6.02	7
Professional Occupations	160	1.93	N/A
Industrial Engineer	30	0.26	18
Purchasing Agent/Buyer	30	0.36	12
Accountants/Auditors	60	0.72	15
Personnel/Labor Relations Specialist	10	0.12	13
Designer	10	0.12	14
All Other Professional Workers	20	0.24	N/A
Technical Occupations	20	0.24	20
Service Occupations	130	1.56	N/A
Janitors, Porters, and Cleaners	70	0.84	14
All Other Service Workers	60	0.72	N/A
Maintenance and Production Occupations	6,240	75.09	N/A
Supervisor, Nonworking	280	3.37	9
Mechanic, Maintenance	10	0.12	33
Truck Driver	130	1.56	16
Cabinetmaker	230	2.77	25
Carpenter	60	0.72	27
Industrial Truck Operator	40	0.48	17
Inspector	60	0.72	17
Machinist	20	0.24	15
Maintenance Repairer, General Utility	20	0.24	16
Helper, Trades	110	1.32	21
Production Packager	130	1.56	18
Sewing Machine Operator, Regular Equipment Nongarment	350	4.21	13
Stationary Boiler Firer	20	0.24	30
Tool and Die Maker	10	0.12	31
Furniture Finisher	80	0.96	16
Band-Scroll Saw Operator	30	0.36	16
Boring Machine Operator	60	0.72	15
Cut-Off Saw Operator, Lumber	120	1.44	14
Dowel Machine Operator	10	0.12	19
Gluing Machine Operator	20	0.24	20
Lay-Out Marker, Wood	20	0.24	27
Lathe Operator, Wood	40	0.48	20
Lay-Out Marker, Metal	10	0.12	32
Machine Setter, Woodworking	30	0.36	23
Wood Machinist	250	3.01	30
Off-Bearer	60	0.72	23
Ripsaw Operator	120	1.44	13
Rubber	70	0.84	24
Sander, Wood	320	3.85	13

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Shaper, Hand	20	0.24	23
Shaper/Router Operator	40	0.48	14
Sorter, Upholstery Parts	20	0.24	27
Springer	70	0.84	17
Tenoner Operator	20	0.24	31
Upholstery Trimmer	40	0.48	28
Variety Saw Operator	50	0.60	18
Woodworking Machine Operator	240	2.89	14
Painter, Production	220	2.65	17
Punch Press Operator, Metal	40	0.48	19
Punch Press Setter, Metal	20	0.24	35
Shear/Slitter Setter	10	0.12	29
Upholsterer	370	4.45	19
Upholstery Cutter	160	1.93	14
Gluer/Cementer, Hand	20	0.24	32
Welders/Flamecutters	50	0.60	18
Cushion Maker	60	0.72	20
Assembler, Class A	140	1.68	25
Assembler, Class B	260	3.13	19
Assembler, Class C	380	4.57	22
Decorator, Hand	30	0.36	20
All Other Skilled Workers	190	2.29	N/A
All Other Semiskilled Workers	510	6.14	N/A
All Other Unskilled Workers	570	6.86	N/A
Clerical Occupations	930	11.19	N/A
Clerical Supervisor	20	0.24	25
Bookkeeping/Billing Machine Operator	30	0.36	25
Keypunch Operator	10	0.12	19
All Other Office Machine Operators	20	0.24	N/A
Accounting Clerk	40	0.48	15
Bookkeeper, Hand	90	1.08	14
File Clerk	10	0.12	21
General Clerk, Office	150	1.81	11
Order Clerk	30	0.36	20
Payroll/Timekeeping Clerk	40	0.48	11
Procurement Clerk	10	0.12	19
Secretary	80	0.96	13
Switchboard Operator/Receptionist	30	0.36	15
Typist	30	0.36	26
All Other Office Clerical Workers	30	0.36	N/A
Production Clerk/Coordinator	30	0.36	21
Shipping Packer	130	1.56	14
Shipping/Receiving Clerk	90	1.08	11
Stock Clerk	50	0.60	24
All Other Clerical Workers	10	0.12	24

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Sales Occupations	330	3.97	N/A
Sales Representatives	310	3.73	16
All Other Sales Workers	20	0.24	N/A
TOTAL	8,310	100.00	N/A

N/A Relative Error Not Available

Note: May not add to totals due to rounding.

RANKED OCCUPATIONAL EMPLOYMENT IN THE FURNITURE AND FIXTURES INDUSTRY

SIC 25

	OCCUPATION	EMPLOYMENT
1.	All Other Unskilled Workers	570
2.	All Other Semiskilled Workers	510
3.	Managers and Officers	500
4.	Assembler, Class - C	380
5.	Upholster	370
6.	Sewing Machine Operator, Regular Equipment, Nongarment	350
7.	Sander, Wood	320
8.	Sales Representatives	310
9.	Supervisor, Nonworking	280
10.	Assembler, Class - B	260
		3,850

These 10 occupations make up 46% of total industry employment.

OCCUPATIONS OF EMPLOYEES
HOUSEHOLD FURNITURE (SIC 251)

Reference Date June 1977

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	360	5.37	8
Professional Occupations	120	1.79	N/A
Industrial Engineer	30	0.45	18
Purchasing Agent/Buyer	20	0.30	12
Accountants/Auditors	40	0.60	19
Personnel/Labor Relations Specialist	10	0.15	11
Designer	10	0.15	14
All Other Professional Workers	10	0.15	N/A
Technical Occupations	10	0.15	N/A
Service Occupations	120	1.79	N/A
Janitors, Porters, and Cleaners	60	0.45	14
All Other Service Workers	60	0.89	N/A
Maintenance and Production Occupations	5,120	76.30	N/A
Supervisor, Nonworking	220	3.28	9
Mechanic, Maintenance	10	0.15	33
All Other Mechanics and Repairers	20	0.30	N/A
Truck Driver	100	1.49	18
Cabinetmaker	130	1.94	35
Industrial Truck Operator	30	0.45	20
Inspector	60	0.89	17
Machinist	20	0.30	14
Maintenance Repairer, General Utility	20	0.30	17
Helper, Trades	70	1.04	29
Upholstery Cutter	160	2.38	14
Gluer/Cementer, Hand	20	0.30	33
Cushion Maker	60	0.89	20
Assembler - A	110	1.64	30
Assembler - B	220	3.28	22
Assembler - C	350	5.22	23
Decorator, Hand	30	0.45	20
All Other Skilled Workers	50	0.75	N/A
All Other Semiskilled Workers	370	5.51	N/A
All Other Unskilled Workers	480	7.15	N/A
Clerical Occupations	730	10.88	N/A
Clerical Supervisor	10	0.15	27
Bookkeeping/Billing Machine Operator	20	0.30	28
Keypunch Operator	10	0.15	19
All Other Office Machine Operators	20	0.30	N/A
Accounting Clerk	30	0.45	16
Bookkeeper, Hand	60	0.89	16

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
File Clerk	10	0.15	21
General Clerk	130	1.94	12
Order Clerk	30	0.45	21
Payroll/Timekeeping Clerk	30	0.45	12
Procurement Clerk	10	0.15	15
Secretary	60	0.89	15
Switchboard Operator/Receptionist	20	0.30	17
Typist	20	0.30	28
All Other Office Clerical Workers	40	0.60	N/A
Production Packager	110	1.64	19
Sewing Machine Operator, Regular Equipment, Nongarment	340	5.07	13
Stationary Boiler Firer	20	0.30	30
Furniture Finisher	80	1.19	16
Band-Scroll Saw Operator	20	0.30	17
Boring-Machine Operator	60	0.89	15
Cut-Off-Saw Operator	110	1.64	15
Dowel Machine Operator	10	0.15	19
Gluing Machine Operator	20	0.30	20
Lathe Operator, Wood	40	0.60	20
Machine Setter, Woodworking	30	0.45	23
Wood Machinist	210	3.13	35
Off-Bearer	60	0.89	23
Ripsaw Operator	110	1.64	14
Rubber	70	1.04	25
Sander,Wood	300	4.47	14
Shaper, Hand	20	0.30	23
Shaper/Router Operator	40	0.60	14
Sorter, Upholstery Parts	20	0.30	27
Springer	70	1.04	17
Tenoner Operator	20	0.30	31
Upholstery Trimmer	40	0.60	28
Variety Saw Operator	30	0.45	25
Woodworking Machine Operator	200	2.98	15
Painter,Production	180	2.68	20
Punch-Press Operator, Metal	10	0.15	34
Upholsterer	370	5.51	19
Production Clerk	20	0.30	20
Shipping Packer	100	1.49	16
Shipping/Receiving Clerk	60	0.89	12
Stock Clerk, Storeroom	40	0.60	27
All Other Plant Clerical Workers	10	0.15	N/A
Sales Occupations	250	3.73	N/A
Sales Representatives	240	3.58	21
All Other Sales Workers	10	0.15	N/A
TOTAL	6,710	100.00	N/A

N/A Relative Error Not Available
Note: May not add to totals due to rounding.

OCCUPATIONS OF EMPLOYEES
PAPER AND ALLIED PRODUCTS (SIC 26)

Reference Date April 1977

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	1,760	5.99	7
Professional Occupations	920	3.13	N/A
Chemical Engineer	40	0.14	21
Electrical/Electronic Engineer	30	0.10	17
Industrial Engineer	60	0.20	13
Mechanical Engineer	100	0.34	14
All Other Engineers	40	0.14	21
Chemist	100	0.34	14
All Other Physical Scientists	20	0.07	N/A
Systems Analyst, EDP	40	0.14	17
Purchasing Agent/Buyer	20	0.07	10
Accountant/Auditor	190	0.65	9
Commercial Artist	30	0.10	29
Nurse, Professional	20	0.07	13
Personnel/Labor Relations Specialist	70	0.24	11
Designer	80	0.27	15
All Other Professional Workers	80	0.27	N/A
Technical Occupations	430	1.46	N/A
Computer Programmer	50	0.17	22
Drafter	40	0.14	15
All Other Engineering Technicians	110	0.37	22
Science Technicians	80	0.27	15
Service Occupations	430	1.46	N/A
Supervisor, Nonworking Service	40	0.14	34
Janitors, Porters, & Cleaners	270	0.92	7
Guards and Doorkeepers	70	0.24	25
All Other Service Workers	50	0.17	N/A
Maintenance and Production Occupations	21,210	72.19	N/A
Supervisor, Nonworking	1,170	3.98	7
Mechanic, Automotive	40	0.14	15
Mechanic, Maintenance	250	0.85	18
Truck Driver	370	1.26	11
Carpenter	60	0.20	15
Compositor/Typesetter	40	0.14	22
Electrician	190	0.65	7
Industrial Truck Operator	650	2.21	10
Inspector	240	0.82	20
Instrument Mechanic	30	0.10	12
Machinist	230	0.78	14
Maintenance Repairer, General Utility	230	0.78	18
Helper, Trade	140	0.48	24
Millwright	260	0.88	11
Oiler	70	0.24	12

SIC 26 (cont.)

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Order Filler	220	0.75	18
Painter, Maintenance	30	0.10	26
Plumber/Pipefitter	100	0.34	10
Press Operator	610	2.08	17
Production Packager	1,030	3.51	19
Scrapper/Stripper	240	0.82	21
Stationary Boiler Firer	190	0.65	10
Stationary Engineer	140	0.48	16
Tool and Die Maker	40	0.14	27
Welder/Flamecutter	40	0.14	13
Back Tender	300	1.02	5
Beater Engineer	190	0.65	8
Beater	200	0.68	9
Box Maker, Paperboard	60	0.20	29
Carton-Forming-Machine Operator	140	0.48	31
Coating Mixer Tender	80	0.27	19
Combiner Operator	60	0.20	25
Corrugator-Knife Operator	50	0.17	30
Corrugator Operator	70	0.24	24
Creping Machine Operator	30	0.10	13
Cut & Creasing Press Operator	180	0.61	21
Cylinder Machine Tender	60	0.20	18
Die Cutter	280	0.95	25
Die Maker	90	0.31	17
Die Mounter	30	0.10	22
Digester Operator	10	0.03	28
Etcher/Engraver	70	0.24	22
Flexo-Folder-Gluer Operator	110	0.37	25
Fourdrinier Machine Tender	240	0.82	6
Machine Setter, Paper Goods	330	1.12	25
Paper Reel/Rewinder Operator	250	0.85	27
Printer-Slotter Operator	130	0.44	26
Printer-Slotter Feeder	90	0.31	25
Pulper	100	0.34	19
Scorer	70	0.24	31
Slitting Machine Operator	450	1.53	21
Slotter Operator	50	0.17	33
Stapline Machine Operator	40	0.14	29
Supercalender Operator	100	0.34	21
Taping Machine Operator	80	0.27	28
Tester	230	0.78	12
Waxing Machine Operator	40	0.14	34
Winder, Paper Machine	300	1.02	7
Wrapping Machine Operator	230	0.78	28
Fourth/Fifth Hand, Paper Machine	290	0.99	11
Knotting/The Machine Operator	60	0.20	N/A
Stringing/Tape Fastener Machine Operator	20	0.07	N/A
Baling Machine Operator	190	0.65	14
Cutter, Machine	580	1.97	26

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Bindery Worker, Assembly	50	0.17	34
Bindery Worker, Stitching	10	0.03	31
All Other Bindery Workers	30	0.10	26
Extruder Operator, Plastic	50	0.17	34
Assembler, Class C	720	2.45	31
All Other Skilled Workers	380	1.29	N/A
All Other Semiskilled Workers	4,780	16.27	N/A
All Other Unskilled Workers	2,700	9.19	N/A
Clerical Occupations	3,750	12.76	N/A
Clerical Supervisor	140	9.48	15
Bookkeeping/Billing Machine Operator	60	0.20	22
Computer Operator	60	0.20	16
Keypunch Operator	100	0.34	11
All Other Office Machine Operators	40	0.14	31
Stenographer	50	0.17	24
Accounting Clerk	160	0.54	12
Bookkeeper, Hand	90	0.31	17
File Clerk	40	0.14	25
General Clerk, Office	540	1.84	7
Order Clerk	180	0.61	12
Payroll/Timekeeping Clerk	140	0.48	11
Personnel Clerk	40	0.14	15
Procurement Clerk	50	0.17	24
Secretary	370	1.26	9
Statistical Clerk	60	0.20	17
Switchboard Operator	30	0.10	31
Switchboard Operator/Receptionist	100	0.34	14
Typist	100	0.34	33
Box Estimator, Paper	90	0.31	16
All Other Office Clerical Workers	100	0.34	N/A
Production Clerk/Coordinator	200	0.68	9
Shipping/Receiving Clerk	380	1.29	14
Weigher, Record Keeping	20	0.07	27
Stock Clerk	160	0.54	17
All Other Plant Clerical Workers	450	1.53	N/A
Sales Occupations	880	3.00	N/A
Sales Representatives	850	2.89	9
All Other Sales Occupations	30	0.10	N/A
TOTAL	29,380	100.00	N/A

N/A Relative Error Not Available

Note: May not add to totals due to rounding.

RANKED OCCUPATIONAL EMPLOYMENT IN THE PAPER AND ALLIED PRODUCTS INDUSTRY

SIC 26

	OCCUPATION	EMPLOYMENT
1.	All Other Semiskilled Workers	4,780
2.	All Other Unskilled Workers	2,700
3.	Managers and Officers	1,760
4.	Supervisor, Nonworking	1,170
5.	Production Packager	1,030
6.	Sales Representatives	850
7.	Assembler, Class - C	720
8.	Industrial Truck Operator	650
9.	Press Operator	610
10.	Cutter, Machine	580
		14,850

These 10 occupations make up 51% of total industry employment.

OCCUPATIONS OF EMPLOYEES
PAPER MILLS, EXCEPT BUILDING PAPER MILLS (SIC 262)

Reference Date April 1977

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	330	5.23	9
Professional Occupations	260	4.12	N/A
Chemical Engineer	30	0.48	23
Electrical Engineer	10	0.16	35
Industrial Engineer	10	0.16	22
Mechanical Engineer	20	0.32	24
All Other Engineers	10	0.16	29
Chemist	30	0.48	16
All Other Physical Scientists	10	0.16	N/A
Purchasing Agent/Buyer	30	0.48	11
Accountants/Auditors	50	0.79	9
Personnel/Labor Relations Specialist	20	0.32	13
All Other Professional Workers	40	0.63	N/A
Technical Occupations	100	1.58	N/A
Drafter	10	0.16	24
All Other Engineering Technicians	80	1.27	N/A
All Other Technicians	10	0.16	N/A
Service Occupations	140	2.22	N/A
Janitors, Porters, Cleaners	80	1.27	11
Guards and Doorkeepers	40	0.63	24
All Other Service Workers	20	0.32	N/A
Maintenance and Production Occupations	4,760	75.44	N/A
Supervisor, Nonworking	300	4.75	9
Mechanic, Automotive	10	0.16	18
Mechanic, Maintenance	50	0.79	30
Truck Driver	50	0.79	11
Electrician	80	1.27	7
Industrial Truck Operator	140	2.22	13
Inspector	50	0.79	20
Instrument Mechanic	30	0.48	14
Machinist	30	0.48	15
Maintenance Repairer,General Utility	70	1.11	20
Helper, Trades	60	0.95	45
Millwright	150	2.38	12
Oiler	40	0.63	14
Order Filler	40	0.63	37
Painter, Maintenance	20	0.32	14
Plumber/Pipefitter	60	0.95	12
Production Packager	290	4.60	24
Stationary Boiler Firer	100	1.58	15

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Stationary Engineer	80	1.27	16
Welders and Flamecutters	20	0.32	15
Air-Drier-Machine Tender	30	0.48	37
Back Tender	260	4.12	5
Beater Engineer	160	2.54	8
Beater	160	2.54	12
Coater Operator Off-Machine	20	0.32	26
Coating Mixer Tender	30	0.48	37
Cylinder-Machine Tender	30	0.48	39
Digester Operator	10	0.16	28
Fourdrinier Machine Tender	240	3.80	6
Layboy Tender	40	0.63	37
Machine-Setter, Paper Goods	50	0.79	39
Paper Reel/Rewinder Operator	80	1.27	25
Pulper	70	1.11	22
Slitting Machine Operator	140	2.22	28
Super Calender Operator	90	1.43	23
Tester	170	2.69	13
Wet-Machine Tender	10	0.16	48
Winder, Paper Machine	250	3.96	6
4th Hand/5th Hand/Paper Machine	130	2.06	16
Baling Machine Operator	40	0.63	16
Cutter, Machine	100	1.58	25
Embossing, Stamping, Marking Machine Operator	10	0.16	44
Mixer/Blender, Chemicals	30	0.48	35
All Other Skilled Workers	80	1.27	N/A
All Other Semiskilled Workers	440	6.97	N/A
All Other Unskilled Workers	420	6.66	N/A
Clerical Occupations	620	9.83	N/A
Clerical Supervisors	20	0.32	23
Bookkeeping & Billing Machine Operator	10	0.16	36
Computer Operator	10	0.16	24
Keypunch Operator	10	0.16	24
Stenographer	10	0.16	33
Accounting Clerk	50	0.79	21
Bookkeeper, Hand	10	0.16	22
Order Clerk	40	0.63	15
Payroll/Timekeeping Clerk	30	0.48	18
Procurement Clerk	10	0.16	17
Secretary	80	1.27	14
Statistical Clerk	30	0.48	21
Switchboard Operator/Receptionist	20	0.32	14
Typist	20	0.32	29
All Other Office Clerical Workers	40	0.63	N/A
Production Clerk	30	0.48	11
Shipping Packer	80	1.27	19
Shipping/Receiving Clerk	40	0.63	12

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Weigher	20	0.32	27
Stock Clerk, Storeroom	40	0.63	18
All Other Plant Clerical Workers	20	0.32	32
Sales Occupations	100	1.58	N/A
Sales Representatives	90	1.43	14
All Other Sales Workers	10	0.16	N/A
TOTAL	6,310	100.00	N/A

N/A Relative Error Not Available

Note: May not add to totals due to rounding.

OCCUPATIONS OF EMPLOYEES
MISCELLANEOUS CONVERTED PAPER PRODUCTS (SIC 264)

Reference Date April 1977

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	960	7.42	11
Professional Occupations	550	4.25	N/A
Electrical/Electronic Engineer	10	0.08	11
Industrial Engineer	40	0.31	17
Mechanical Engineer	60	0.46	21
All Other Engineers	30	0.23	N/A
Chemist	70	0.54	19
Systems Analyst, E.D.P.	40	0.31	19
Purchasing Agent/Buyer	40	0.31	21
Accountants/Auditors	100	0.77	16
Nurse, Professional	10	0.08	16
Personnel/Labor Relations Specialist	30	0.23	20
Designer	40	0.31	23
All Other Professional Workers	80	0.62	N/A
Technical Occupations	320	2.47	N/A
Computer Programmer	40	0.31	27
Drafter	30	0.23	18
Science Technicians	70	0.54	16
All Other Technicians	180	1.39	N/A
Service Occupations	180	1.39	N/A
Janitors, Porters, and Cleaners	130	1.01	11
All Other Service Workers	50	0.39	N/A
Maintenance and Production Occupations	8,380	64.81	N/A
Supervisor, Nonworking	450	3.48	13
Mechanics and Repairers	90	0.70	N/A
Truck Driver	60	0.46	27
Carpenter	20	0.15	12
Compositor/Typesetter	30	0.23	20
Electrician	60	0.46	15
Industrial Truck Operator	230	1.78	19
Machinist	140	1.08	22
Helper, Trades	40	0.31	33
Millwright	60	0.46	35
Oiler	10	0.08	34
Order Filler	120	0.93	26
Plumber/Pipefitter	20	0.15	29
Press Operator	330	2.55	26
Stationary Boiler Firer	20	0.15	28
Coating Mixer Tender	50	0.39	20
Creping-Machine Operator	20	0.15	1
Cut and Creasing Press Operator	10	0.08	31
Etcher/Engraver	40	0.31	19

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Folding-Machine Feeder	20	0.15	25
Knotting/Tagging Machine Operator	60	0.46	1
Stringer/Tape Fastener	20	0.15	5
Bindery Worker, Assembly	40	0.31	31
Bindery Worker, Stitching	10	0.08	31
All Other Bindery Workers	20	0.15	30
Extruder Operator, Plastics	50	0.39	34
All Other Skilled Workers	370	2.86	N/A
All Other Semiskilled Workers	4,500	34.80	N/A
All Other Unskilled Workers	1,490	11.52	N/A
Clerical Occupations	2,110	16.32	N/A
Clerical Supervisor	100	0.77	18
Computer Operators	30	0.23	20
Keypunch Operators	80	0.63	13
Accounting Clerk	70	0.54	19
Bookkeeper, Hand	40	0.31	31
General Clerk	430	3.33	8
Order Clerk	90	0.70	20
Payroll/Timekeeping Clerk	60	0.46	19
Secretary	210	1.62	13
All Other Office Clerical Workers	300	2.32	N/A
Production Clerk	100	0.77	15
Shipping/Receiving Clerk	260	2.01	20
Stock Clerk, Storeroom	80	0.62	30
All Other Plant Clerical Workers	260	2.01	N/A
Sales Occupations	430	3.33	N/A
Sales Representatives	410	3.17	17
All Other Sales Workers	20	0.15	N/A
TOTAL	12,930	100.00	N/A

N/A Relative Error Not Available

Note: May not add to totals due to rounding.

OCCUPATIONS OF EMPLOYEES
GREETING CARD PUBLISHING (SIC 277)

Reference Date May 1977

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	100	7.30	1
Professional Occupations	110	8.03	N/A
Statistician	20	1.46	1
Designer	50	3.65	1
All Other Professional Workers	40	2.92	N/A
Technical Occupations	10	0.73	N/A
Maintenance and Production Workers	410	29.93	N/A
Supervisor, Nonworking	10	0.73	1
Inspector	30	2.19	1
Order Filler	30	2.19	1
Production Packager	30	2.19	1
Offset Lithographic Operator	20	1.46	1
Steel Die Press Operator	10	0.73	1
Press Assistants and Feeders	10	0.73	1
All Other Skilled Workers	20	1.46	N/A
All Other Semiskilled Workers	210	15.33	N/A
All Other Unskilled Workers	40	2.93	N/A
Clerical Occupations	280	20.44	N/A
Clerical Supervisor	40	2.92	1
Computer Operator	10	0.73	1
Keypunch Operator	20	1.46	1
General Clerk	90	6.57	1
Order Clerk	30	2.19	1
Secretary	20	1.46	1
Typist	10	0.73	1
All Other Office Clerical Workers	30	2.19	N/A
Shipping Packer	20	1.46	1
All Other Plant Clerical Workers	10	0.73	1
Sales Occupations	460	33.58	N/A
Sales Representatives	230	16.79	1
All Other Sales Workers	230	16.79	1
TOTAL	1,370	100.00	N/A

N/A Relative Error Not Available

Note: May not add to totals due to rounding.

OCCUPATIONS OF EMPLOYEES
PRINTING TRADE SERVICES (SIC 279)

Reference Date May 1977

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	90	8.82	6
Professional Occupations	20	1.96	N/A
Service Occupations	10	0.98	N/A
Maintenance and Production Occupations	710	69.61	N/A
Supervisor, Nonworking	30	2.94	10
Delivery and Route Workers	20	1.96	19
Platemaker	30	2.94	32
Stripper	60	5.88	16
Camera Operator, Printing	60	5.88	12
Copy Marker	20	1.96	23
Hand Compositor	20	1.96	35
Line Casting Machine Operator	30	2.94	24
Line Casting Machine Keyboard Operator	70	6.86	19
Pasteup Man/Woman	20	1.96	21
Phototypesetting-Machine Keyboard Operator	30	2.94	29
Phototypesetter Operator	20	1.96	34
Proofreader, Composed Copy	70	6.86	12
Photoengraver	50	4.90	26
All Other Skilled Workers	20	1.96	N/A
All Other Semiskilled Workers	110	10.78	N/A
All Other Unskilled Workers	50	4.90	N/A
Clerical Occupations	110	10.78	N/A
Bookkeeper, Hand	10	0.98	21
General Clerk	30	2.94	12
Secretary	10	0.98	17
Typist	20	1.96	17
All Other Office Clerical Workers	20	1.96	N/A
Shipping/Receiving Clerk	20	1.96	21
Sales Occupations	80	7.84	N/A
TOTAL	1,020	100.00	N/A

N/A Relative Error Not Available

Note: May not add to totals due to rounding.

OCCUPATIONS OF EMPLOYEES
PAINTS AND ALLIED PRODUCTS (SIC 285)

Reference Date June 1977

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	140	11.11	8
Professional Occupations	100	7.94	N/A
Chemist	80	6.35	12
Accountant/Auditors	10	0.79	27
All Other Professional Workers	10	0.79	N/A
Technical Occupations	10	0.79	N/A
Service Occupations	10	0.79	N/A
Maintenance and Production Workers	680	53.97	N/A
Supervisor, Nonworking	30	2.38	17
Truck Driver	30	2.38	23
Industrial Truck Operator	20	1.59	25
Inspector	10	0.79	22
Maintenance Repairer, General Utility	20	1.59	15
Order Filler	30	2.38	30
Production Packager	140	11.11	20
Chemical Operator, Helper	20	1.59	23
Grinder Operator, Chemical	30	2.38	21
Tinter	60	4.76	13
Mixer/Blender, Chemical	100	7.94	15
All Other Skilled Workers	30	2.38	N/A
All Other Semiskilled Workers	90	7.14	N/A
All Other Unskilled Workers	70	5.56	N/A
Clerical Occupations	220	17.46	N/A
Accounting Clerk	30	2.38	22
General Clerk	40	3.17	15
Order Clerk	10	0.79	19
Secretary	30	2.38	14
All Other Office Clerical Workers	60	4.76	N/A
Shipping Packer	20	1.59	27
Shipping/Receiving Clerk	30	2.38	15
Sales Occupations	100	7.94	N/A
TOTAL	1,260	100.00	N/A

N/A Relative Error Not Available

Note: May not add to totals due to rounding.

OCCUPATIONS OF EMPLOYEES
TIRES AND INNER TUBES (SIC 301)

Reference Date June 1977

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	70	3.00	40
Professional Occupations	80	3.43	N/A
Mechanical Engineer	10	0.43	3
All Other Engineers	30	1.29	N/A
Accountants/Auditors	20	0.86	23
All Other Professional Occupations	20	0.86	N/A
Technical Occupations	50	2.15	N/A
Science Technicians	50	2.15	3
Service Occupations	150	6.44	N/A
Janitors, Porters, Cleaners	40	1.72	3
All Other Service Workers	110	4.72	3
Maintenance and Production Occupations	1,850	79.40	N/A
Supervisor, Nonworking	150	6.44	1
Mechanic, Maintenance	110	4.72	3
Truck Driver	20	0.86	3
Carpenter	10	0.43	3
Electrician	50	2.15	3
Rigger	10	0.43	3
Industrial Truck Operator	90	3.86	3
Inspector	120	5.15	7
Machinist	10	0.43	35
Order Filler	50	2.15	3
Plumber/Pipefitter	40	1.72	3
Production Packager	30	1.29	3
Sheet Metal Workers	10	0.43	3
Stationary Engineer	10	0.43	3
Tool and Die Maker	10	0.43	3
Bead Flipper	10	0.43	3
Bead Forming Machine Operator	10	0.43	3
Bias Machine Operator	230	9.87	3
Chemical Operator Helper	20	0.86	3
Rubber-Mill Operator	120	5.15	3
Tester	30	1.29	3
Tire Builder	200	8.58	3
Tire Finisher	20	0.86	3
Tire Repairer	90	3.86	3
Watchcase Vulcanizer	100	4.29	3
Drier Operator	10	0.43	3
Calender Operator	10	0.43	3
Extruder Operator	10	0.43	3
Extruder Operator Helper	30	1.29	3
Calender Operator Helper	20	0.86	3

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Mixer/Blender Chemicals	20	0.86	3
All Other Skilled Workers	50	2.15	N/A
All Other Semiskilled Workers	100	4.29	N/A
All Other Unskilled Workers	50	2.15	N/A
Clerical Occupations	120	5.15	N/A
Order Clerk	10	0.43	3
Payroll/Timekeeping Clerk	10	0.43	3
Secretary	20	0.86	25
Typist	40	1.72	3
All Other Office Clerical Occupations	10	0.43	N/A
Production Clerk	20	0.86	3
Shipping/Receiving Clerk	10	0.43	40
Sales Occupations	10	0.43	N/A
Sales Representatives	10	0.43	3
TOTAL	2,330	100.00	N/A

N/A Relative Error Not Available

Note: May not add to totals due to rounding.

OCCUPATIONS OF EMPLOYEES
MISCELLANEOUS PLASTICS PRODUCTS (SIC 307)

Reference Date June 1977

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	1,290	6.46	5
Professional Occupations	590	2.95	N/A
Chemical Engineer	20	0.10	16
Electrical/Electronic Engineer	20	0.10	23
Industrial Engineer	40	0.20	14
Mechanical Engineer	90	0.45	14
All Other Engineers	50	0.25	14
Chemist	30	0.15	18
Systems Analyst E.D.P.	20	0.10	18
Purchasing Agent/Buyer	100	0.50	10
Accountants/Auditors	130	0.65	11
Personnel/Labor Relations Specialist	50	0.25	11
Designer	30	0.15	15
All Other Professional Workers	10	0.05	N/A
Technical Occupations	280	1.40	N/A
Computer Programmer	30	0.15	11
Drafter	40	0.20	12
All Other Engineering Technicians	90	0.45	N/A
Science Technicians	110	0.55	14
All Other Technicians	10	0.05	N/A
Service Occupations	290	1.45	N/A
Supervisor, Nonworking, Service	10	0.05	25
Janitors, Porters, and Cleaners	230	1.15	14
Guards and Doorkeepers	30	0.15	23
Food Service Workers	10	0.05	8
All Other Service Workers	10	0.05	N/A
Maintenance and Production Occupations	15,240	76.28	N/A
Supervisor, Nonworking	720	3.60	8
Mechanic, Maintenance	420	2.10	13
All Other Mechanics and Repairers	40	0.20	N/A
Truck Driver	80	0.40	12
Electrician	50	0.25	12
Industrial Truck Driver	150	0.75	13
Inspector	410	2.05	12
Machinist	320	1.60	22
Maintenance Repairer, General Utility	240	1.20	19
Helper, Trades	60	0.30	23
Oiler	10	0.05	27
Order Filler	70	0.35	20
Press Operator	10	0.05	34
Production Packager	1,320	6.61	15
Tool and Die Maker	150	0.75	31
Chemical Operator - A	40	0.20	20

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Chemical Operator Helper	50	0.25	27
Die Cutter	20	0.10	34
Tumbler Operator, Plastics	10	0.05	13
Compression/Injection Molding Machine Operator	3,120	15.62	10
Setter, Plastic Molding Machine	210	1.05	21
Weigher, Production	50	0.25	30
Embossing/Stamping/Marking Machine Operator	90	0.45	17
Grinder Operator	120	0.60	19
Extruder Operator, Plastic	630	3.15	23
Extruder Operator, Helper	370	1.85	18
Heat Sealer	210	1.05	30
Assembler - B	180	0.90	37
Assembler - C	1,600	8.01	16
Mixer/Blender, Chemical	170	0.85	13
Blow-Molding Machine Operator	380	1.90	27
All Other Skilled Workers	390	1.95	N/A
All Other Semiskilled Workers	1,570	7.86	N/A
All Other Unskilled Workers	1,980	9.91	N/A
Clerical Occupations	1,890	9.46	N/A
Clerical Supervisor	60	0.30	10
Bookkeeping/Billing Machine Operator	30	0.15	19
Computer Operator	30	0.15	17
Keypunch Operator	30	0.15	22
All Other Office Machine Operators	20	0.10	N/A
Stenographer	20	0.10	10
Accounting Clerk	120	0.60	11
Bookkeeper, Hand	50	0.25	26
General Clerk	210	1.05	15
Order Clerk	50	0.25	17
Payroll/Timekeeping Clerk	60	0.30	8
Personnel Clerk	20	0.10	17
Procurement Clerk	20	0.10	17
Receptionist	20	0.10	21
Secretary	250	1.25	11
Statistical Clerk	20	0.10	27
Switchboard Operator/Receptionist	50	0.25	9
Typist	40	0.20	16
All Other Office Clerical Workers	70	0.35	N/A
Production Clerk	100	0.50	8
Shipping Packer	280	1.40	17
Shipping/Receiving Clerk	210	1.05	12
Stock Clerk, Storeroom	80	0.40	19
All Other Plant Clerical Workers	50	0.25	22
Sales Occupations	400	2.00	N/A
Sales Representatives	380	1.90	13
All Other Sales Workers	20	0.10	N/A
TOTAL	19,980	100.00	N/A

N/A Relative Error Not Available Note: May not add to totals due to rounding.

OCCUPATIONS OF EMPLOYEES
LEATHER AND LEATHER PRODUCTS (SIC 31)

Reference Date May 1977

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	990	4.22	10
Professional Occupations	390	1.66	N/A
Industrial Engineer	40	0.17	15
Mechanical Engineer	20	0.09	30
All Other Engineers	10	0.04	N/A
Chemist	20	0.09	22
All Other Physical Scientist	10	0.04	N/A
Systems Analyst, EDP	20	0.09	27
Purchasing Agent/Buyer	100	0.43	12
Accountants/Auditors	90	0.38	21
Personnel/Labor Relations Specialist	30	0.13	17
Designer	40	0.17	17
All Other Professional Workers	10	0.04	N/A
Technical Occupations	60	0.26	N/A
Computer Programmer	20	0.09	25
Engineering Technicians	10	0.04	29
Science Technicians	10	0.04	28
All Other Technicians	20	0.09	22
Service Occupations	230	0.98	N/A
Janitors, Porters, and Cleaners	120	0.51	8
Guards and Doorkeepers	60	0.26	17
All Other Service Workers	50	0.21	N/A
Maintenance and Production Occupations	18,500	78.89	N/A
Supervisor, Nonworking	560	2.39	6
Mechanic, Maintenance	70	0.30	15
Truck Driver	60	0.26	14
Carpenter	40	0.17	21
Industrial Truck Operator	60	0.26	19
Inspector	220	0.94	12
Machinist	80	0.34	13
Maintenance Repairer, General Utility	130	0.55	15
Production Packager	460	1.96	13
Sewing Machine Operator, Regular Equipment, Nongarment	660	2.81	22
Sewing Machine Operator, Special Equipment, Nongarment	100	0.43	16
Skiver	310	1.32	9
Trimmer, Machine	220	0.94	10
Assembler for Puller-Over	140	0.60	16
Beamer, Machine	50	0.21	28
Bed Laster	130	0.55	30
Bottom Filler	50	0.21	21

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Buffer, Hides or Skin	100	0.43	11
Buffer, Shoe Parts	140	0.60	11
Burnisher	60	0.26	15
Cementer, Machine Joiner	260	1.11	21
Perforator Operator	90	0.38	16
Cobbler	80	0.34	17
Die Cutter	780	3.33	7
Flamer	60	0.26	11
Floor Boy/Girl	710	3.03	11
Folder, Machine	50	0.21	21
Glue-Spreading-Machine Operator	60	0.26	25
Heel Attacher	80	0.34	16
Heel Breaster, Leather	40	0.17	22
Heel Seat Laster, Machine	60	0.26	12
Heel Seat Fitter, Machine	30	0.13	25
Inker, Hand or Machine	70	0.30	15
Joint Cutter, Machine	20	0.09	22
Leather Stamper, Hand	30	0.13	26
Limer	20	0.09	33
Tanning-Liquor Maker	50	0.21	26
Measuring Machine Operator, Leather	80	0.34	17
Patternmaker	40	0.17	20
Puller-Over	80	0.34	18
Repairer, Finish	270	1.15	13
Rough Rounder, Machine	80	0.34	14
Seam-Rubbing Machine Operator	30	0.13	21
Seasoner, Machine	80	0.34	26
Seasoner Mixer	30	0.13	26
Shank-Piece Tacker	50	0.21	14
Side Laster	130	0.55	13
Sole Leveler Machine	50	0.21	21
Sorter, Leather	240	1.02	10
Splitting Machine Feeder	130	0.55	17
Sprayer, Hand/Machine	160	0.68	13
Stainer	90	0.38	29
Staker, Machine	60	0.26	20
Stitchdown-Thread Laster	10	0.04	31
Stitcher, Special Machine	290	1.24	15
Stitcher, Standard Machine	1,950	8.32	11
Stitcher, Utility	380	1.62	25
Tacker, Toggler and Paster	240	1.02	13
Tanning Drum Operator	110	0.47	14
Thermalasting Machine Operator	40	0.17	31
Toe Laster	30	0.13	21
Treer	120	0.51	18
Wringer-Machine Operator	120	0.51	19
Riveter, Light	80	0.34	26
Conveyor Operator/Tender	60	0.26	18
Vamp Creaser	40	0.17	28
Splitter, Machine	100	0.43	11

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Fastener, Machine	110	0.47	16
Cementer/Paster/Backer/Fitter, Hand	450	1.92	17
Eyelet-Machine Operator	80	0.34	15
Pulling and Lasting Machine Operator	180	0.77	29
Cutter, Hand	220	0.94	14
Gluer/Cementer, Hand	140	0.60	22
Instructor, Leather/Footwear Machinery	20	0.09	35
Handbag Framer	40	0.17	14
Embossing/Stamping/Marking Machine Operator	270	1.15	10
Assembler, Class A	70	0.30	28
Assembler, Class B	230	0.98	9
Assembler, Class C	590	2.52	17
All Other Skilled Workers	400	1.71	N/A
All Other Semiskilled Workers	2,270	9.68	N/A
All Other Unskilled Workers	2,130	9.08	N/A
Clerical Occupations	2,820	12.03	N/A
Clerical, Supervisor	110	0.47	17
Bookkeeping/Billing Machine Operator	50	0.21	19
Computer Operator	40	0.17	23
Keypunch Operator	110	0.47	33
All Other Office Machine Operator	50	0.21	N/A
Accounting Clerk	150	0.64	20
Bookkeeper, Hand	160	0.68	9
File Clerk	40	0.17	17
General Clerk, Office	320	1.36	20
Order Clerk	160	0.68	30
Payroll/Timekeeping Clerk	190	0.81	5
Personnel Clerk	20	0.09	18
Procurement Clerk	30	0.13	20
Secretary	130	0.55	18
Statistical Clerk	10	0.04	27
Switchboard Operator	20	0.09	26
Switchboard Operator/Receptionist	70	0.30	10
Typist	100	0.43	24
All Other Office Clerical Workers	150	0.64	N/A
Production Clerk/Coordinator	70	0.30	14
Shipping Packer	370	1.58	9
Shipping/Receiving Clerk	210	0.90	9
All Other Plant Clerical Workers	260	1.11	N/A
Sales Occupations	460	1.96	N/A
Sales Representative	400	1.71	16
Sales Clerk	60	0.26	32
TOTAL	23,450	100.00	N/A

N/A Relative Error Not Available
Note: May not add to totals due to rounding.

RANKED OCCUPATIONAL EMPLOYMENT IN THE LEATHER AND LEATHER PRODUCTS INDUSTRY

SIC 31

	OCCUPATION	EMPLOYMENT
1.	All Other Semiskilled Workers	2,270
2.	All Other Unskilled Workers	2,130
3.	Stitchers, Standard Machine	1,950
4.	Managers and Officers	990
5.	Die Cutter	780
6.	Floor Boy/Girl	710
7.	Sewing Machine Operator, Regular Equipment, Nongarment	660
8.	Assembler, Class - C	590
9.	Supervisor, Nonworking	560
10.	Production Packager	460
		11,100

These 10 occupations make up 47% of total industry employment.

OCCUPATIONS OF EMPLOYEES
BOOT AND SHOE CUT STOCK AND FINDINGS (SIC 313)

Reference Date May 1977

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	190	7.01	6
Professional Occupations	60	2.21	N/A
Engineers	10	0.37	N/A
Purchasing Agent/Buyer	20	0.74	19
All Other Professional Workers	30	1.11	N/A
Technical Occupations	20	0.74	N/A
Service Occupations	30	1.11	N/A
Janitors, Porters, and Cleaners	10	0.37	22
Guards and Doorkeepers	10	0.37	31
All Other Service Workers	10	0.37	N/A
Maintenance and Production Occupations	2,060	76.01	N/A
Supervisor, Nonworking	60	2.21	16
Mechanic, Maintenance	10	0.37	30
Truck Driver	10	0.37	20
Machinist	10	0.37	19
Maintenance Repairer, General Utility	10	0.37	23
Sewing Machine Operator, Regular Equipment, Nongarment	10	0.37	34
Sewing Machine Operator, Special Equipment, Nongarment	20	0.74	25
Stationary Boiler Firer	10	0.37	29
Skiver	120	4.43	16
Trimmer, Machine	20	0.74	32
Perforator Operator	20	0.74	32
Die Cutter	160	5.90	13
Floor Boy/Girl	80	2.95	18
Sorter, Leather	60	2.21	21
Splitting Machine Feeder	20	0.74	30
Splitter, Machine	30	1.11	23
Cementer, Paster, Backer, Fitter, Hand	20	0.74	33
Cutter, Hand	30	1.11	29
Gluer/Cementer, Hand	60	2.21	27
Embossing, Stamping, Marking Machine Operator	40	1.48	35
Assembler - C	90	3.32	26
All Other Skilled Workers	30	1.11	N/A
All Other Semiskilled Workers	790	29.15	N/A
All Other Unskilled Workers	350	12.92	N/A
Clerical Occupations	300	11.07	N/A
Clerical Supervisor	10	0.37	30
Bookkeeping/Billing Machine Operator	10	0.37	24
Bookkeeper, Hand	40	1.48	13
General Clerk	40	1.48	16

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Payroll/Timekeeping Clerk	10	0.37	20
Secretary	10	0.37	21
Switchboard Operator/Receptionist	10	0.37	23
All Other Office Clerical Workers	50	1.85	N/A
Shipping Packer	60	2.21	16
Shipping/Receiving Clerk	40	1.48	13
All Other Plant Clerical Workers	20	0.74	N/A
Sales Occupations	50	1.85	N/A
TOTAL	2,710	100.00	N/A

N/A Relative Error Not Available

Note: May not add to totals due to rounding.

OCCUPATIONS OF EMPLOYEES
FOOTWEAR, EXCEPT RUBBER (SIC 314)

Reference Date May 1977

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	380	2.60	24
Professional Occupations	200	1.37	N/A
Industrial Engineer	20	0.14	23
All Other Engineers	10	0.07	N/A
Systems Analyst, E.D.P.	20	0.14	33
Purchasing, Agent/Buyer	50	0.34	16
Personnel/Labor Relations Specialist	20	0.14	26
Designer	30	0.20	25
All Other Professional Workers	50	0.34	N/A
Technical Occupations	30	0.20	N/A
Computer Programmer	20	0.14	31
All Other Technicians	10	0.07	N/A
Service Occupations	150	1.02	N/A
Janitors, Porters, and Cleaners	80	0.55	10
Guards and Doorkeepers	40	0.27	23
All Other Service Workers	30	0.20	N/A
Maintenance and Production Occupations	11,770	80.40	N/A
Supervisor, Nonworking	330	2.25	8
Mechanic, Maintenance	20	0.14	25
Truck Driver	30	0.20	21
Carpenter	20	0.14	30
Inspector	110	0.75	21
Machinist	50	0.34	17
Maintenance Repairer, General Utility	60	0.41	22
Production Packager	350	2.39	14
Sewing Machine Operator, Regular Equipment, Nongarment	390	2.66	35
Sewing Machine Operator, Special Equipment, Nongarment	40	0.27	33
Skiver	150	1.02	11
Trimmer, Machine	170	1.16	12
Assembler for Puller-Over, Hand or Machine	140	0.96	16
Bed Laster	130	0.89	30
Bottom Filler	50	0.34	21
Buffer, Shoe Parts	130	0.89	12
Burnisher	50	0.34	17
Cementer, Machine Joiner	210	1.43	24
Perforator Operator	60	0.41	19
Cobbler	80	0.55	17
Die Cutter	490	3.35	10
Flamer	40	0.27	14
Floor Boy/Girl	540	3.69	14
Folder, Machine	30	0.20	24
Heel Attacher	60	0.41	16

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Heel Breaster, Leather	40	0.27	25
Heel-Seat Laster, Machine	60	0.41	12
Heel-Seat Fitter, Machine	30	0.20	25
Inker, Hand or Machine	60	0.41	16
Joint Cutter, Machine	20	0.14	22
Leather Stamper, Hand	20	0.14	34
Patternmaker	30	0.20	27
Puller-over	80	0.55	18
Repairer, Finish	230	1.57	15
Rough Rounder, Machine	80	0.55	14
Seam-Rubbing Machine Operator	30	0.20	21
Shank-Piece Tacker	50	0.34	14
Side Laster	130	0.89	13
Sole Leveler, Machine	40	0.27	21
Sorter, Leather	70	0.48	16
Sprayer, Hand/Machine	80	0.55	14
Stitchdown-Thread Laster	10	0.07	31
Stitcher-Special Machine	280	1.91	16
Stitcher-Standard Machine	1,790	12.23	12
Stitcher, Utility	370	2.53	26
Thermalasting-Machine Operator	40	0.27	33
Toe Laster	30	0.20	21
Treer	120	0.82	18
Conveyor Operator/Tender	40	0.27	20
Vamp Creaser	30	0.20	25
Splitter, Machine	40	0.27	15
Fastener, Machine	100	0.68	16
Cementer, Paster, Backer, Fitter- Hand	420	2.87	17
Eyelet-Machine Operator	60	0.41	16
Molder, Shoe Parts	20	0.14	34
Pulling and Lasting Machine Operator	180	1.23	29
Cutter, Hand	140	0.96	16
Gluer/Cementer, Hand	30	0.20	33
Embossing, Stamping, Marking Machine Operator	130	0.89	13
Assembler - C	200	1.37	23
All Other Skilled Workers	360	2.46	N/A
All Other Semiskilled Workers	1,450	9.90	N/A
All Other Unskilled Workers	1,150	7.86	N/A
Clerical Occupations	1,820	12.43	N/A
Clerical Supervisor	70	0.48	27
Bookkeeping/Billing Machine Operator	30	0.20	26
Computer Operator	30	0.20	25
All Other Office Machine Operators	140	0.96	N/A
Accounting Clerk	110	0.75	26
Bookkeeper, Hand	60	0.41	18
File Clerk	30	0.20	21
General Clerk	250	1.71	26
Payroll/Timekeeping Clerk	130	0.89	6

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Personnel Clerk	10	0.07	27
Procurement Clerk	20	0.14	26
Secretary	80	0.55	30
Switchboard Operator/Receptionist	40	0.27	14
Typist	80	0.55	31
All Other Office Clerical Workers	340	2.32	N/A
Production Clerk	40	0.27	19
Shipping Packer	180	1.23	15
Shipping/Receiving Clerk	90	0.61	10
All Other Plant Clerical Workers	210	1.43	N/A
Sales Occupations	290	1.98	N/A
Sales Representatives	240	1.64	26
All Other Sales Workers	50	0.34	N/A
TOTAL	14,640	100.00	N/A

N/A Relative Error Not Available

Note: May not add to totals due to rounding.

OCCUPATIONS OF EMPLOYEES
HANDBAGS AND OTHER PERSONAL LEATHER GOODS (SIC 317)

Reference Date May 1977

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	90	3.47	11
Professional Occupations	60	2.32	N/A
Industrial Engineer	10	0.39	17
Designer	20	0.77	21
All Other Professional Workers	30	1.16	N/A
Technical Occupations	10	0.39	N/A
Service Occupations	30	1.16	N/A
Janitors, Porters and Cleaners	20	0.77	18
All Other Service Workers	10	0.39	N/A
Maintenance and Production Occupations	1,990	76.83	N/A
Supervisor, Nonworking	100	3.86	14
Mechanic, Maintenance	10	0.39	23
Inspector	100	3.86	13
Order Filler	10	0.39	49
Production Packager	90	3.47	37
Sewing Machine Operator, Reg.Equip., Non-Garment	210	8.11	25
Sewing Machine Operator, Special Equip., Non-Garment	30	1.16	11
Skiver	30	1.16	14
Cementer, Machine Joiner	20	0.77	24
Die Cutter	100	3.86	14
Flamer	10	0.39	1
Floor Boy/Girl	80	3.09	30
Glue-Spreading Machine Operator	30	1.16	40
Repairer, Finisher	40	1.54	33
Stainer	10	0.39	26
Stitcher,Standard Machine	150	5.79	24
Stitcher, Utility	10	0.39	48
Riveter, Light	10	0.39	40
Eyelet-Machine Operator	10	0.39	41
Gluer/Cementer, Hand	40	1.54	36
Handbag Framer	40	1.54	14
Embossing, Stamping, Marking Machine Operator	20	0.77	33
Assembler - B	150	5.79	4
Assembler - C	260	10.04	32
All Other Skilled Workers	30	1.16	N/A
All Other Semiskilled Workers	280	10.81	N/A
All Other Unskilled Workers	120	4.63	N/A
Clerical Occupations	320	12.36	N/A
Clerical Supervisor	30	1.16	12
Keypunch Operator	20	0.77	22
Accounting Clerk	20	0.77	13

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Bookkeeper, Hand	10	0.39	22
Order Clerk	30	1.16	14
Payroll/Timekeeping Clerk	20	0.77	16
Secretary	20	0.77	15
Switchboard Operator/Receptionist	10	0.39	16
All Other Office Clerical Occupations	70	2.70	N/A
Shipping Packer	40	1.54	15
Shipping/Receiving Clerk	20	0.77	20
Stock Clerk, Storeroom	20	0.77	40
All Other Plant Clerical Workers	10	0.39	N/A
Sales Occupations	90	3.47	N/A
TOTAL	2,590	100.00	N/A

N/A Relative Error Not Available

Note: May not add to totals due to rounding.

OCCUPATIONS OF EMPLOYEES
GLASS AND GLASSWARE (SIC 321,322,323)

Reference Date May 1977

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	70	4.24	27
Professional Occupations	30	1.82	N/A
Mechanical Engineers	10	0.61	45
All Other Professional Workers	20	1.21	N/A
Technical Occupations	20	1.21	N/A
Technicians	10	0.61	N/A
All Other Technical Workers	10	0.61	N/A
Service Occupations	60	3.64	N/A
Janitors, Porters, and Cleaners	40	2.42	43
All Other Service Workers	20	1.21	N/A
Maintenance and Production Occupations	1,340	81.21	N/A
Truck Driver	10	0.61	20
Electrician	10	0.61	27
Industrial Truck Operator	60	3.64	18
Inspector	40	2.42	49
Maintenance Repairer, General Utility	60	3.64	49
Production Packager	140	8.48	24
Furnace/Tank Operator	10	0.61	16
Forming Machine Operator, Glass	80	4.85	20
Forming Machine Maintainer	40	2.42	22
Polisher, Mold	10	0.61	18
Selector, Glassware	330	20.00	18
Cullet Crusher and Washer	10	0.61	31
Metal Mold Maker/Repairer	30	1.82	13
Floor Boy/Girl	30	1.82	20
Assembler	80	4.85	39
All Other Skilled Workers	130	7.88	N/A
All Other Semiskilled Workers	220	13.33	N/A
All Other Unskilled Workers	50	3.03	N/A
Clerical Occupations	110	6.67	N/A
Accounting Clerk	20	1.21	47
Bookkeeper, Hand	20	1.21	43
Order Clerk	10	0.61	45
Secretary	10	0.61	46
All Other Clerical Workers	50	3.03	N/A
Sales Occupations	20	1.21	N/A
TOTAL	1,650	100.00	N/A

N/A Relative Error Not Available
Note: May not add to totals due to rounding.

RANKED OCCUPATIONAL EMPLOYMENT IN GLASS AND GLASSWARE INDUSTRY

SIC 321,322,323

	OCCUPATION	EMPLOYMENT
1.	Selector, Glassware	330
2.	All Other Semiskilled Workers	220
3.	Production Packager	140
4.	All Other Skilled Workers	130
5.	Forming Machine Operator, Glass	80
6.	Assembler	80
7.	Managers and Officers	70
8.	Industrial Truck Operator	60
9.	Maintenance Repairer, General Utility . .	60
10.	All Other Unskilled Workers	50
		1,220

These 10 occupations make up 74% of total industry employment.

OCCUPATIONS OF EMPLOYEES
CEMENT, CLAY, POTTERY, CONCRETE, STONE, AND MISCELLANEOUS NONMETALLIC MINERAL PRODUCTS
(SIC 324, 325, 326, 327, 328, and 329)

Reference Date May 1977

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	660	6,90	9
Professional Occupations	540	5.64	N/A
Mechanical Engineer	10	0.10	23
All Other Engineers	220	2.30	N/A
Systems Analyst, EDP	20	0.21	34
Purchasing Agent/Buyer	20	0.21	21
Accountant/Auditor	80	0.84	11
Nurse, Professional	10	0.10	36
Personnel/Labor Relations Specialist	20	0.21	26
All Other Professional Workers	160	1.67	N/A
Technical Occupations	240	2.51	N/A
Computer Programmer	30	0.31	34
Drafter	70	0.73	19
Mechanical Engineering Technician	60	0.63	34
Industrial Engineering Technician	50	0.52	19
All Other Engineering Technicians	30	0.31	28
Service Occupations	140	1.46	N/A
Supervisor, Nonworking	20	0.21	26
Janitors, Porters, and Cleaners	100	1.04	13
Guards and Doorkeepers	20	0.21	21
Maintenance and Production Occupations	6,270	65.52	N/A
Supervisor, Nonworking	310	3.24	8
Mechanic, Automotive	110	1.15	11
Mechanic, Maintenance	220	2.30	7
All Other Mechanics and Repairers	30	0.31	13
Truck Driver	640	6.69	11
Carpenter	20	0.21	22
Concrete Rubber	30	0.31	31
Crane/Derrick/Hoist Operator	20	0.21	22
Delivery/Route Worker	30	0.31	32
Electrician	30	0.31	26
Heavy Equipment Operator	80	0.84	31
Industrial Truck Operator	160	1.67	9
Inspector	120	1.25	17
Machinist	40	0.42	23
Maintenance Repairer, General Utility	70	0.73	22
Millwright	10	0.10	21
Oiler	10	0.10	36
Order Filler	20	0.21	47
Painter, Maintenance	10	0.10	36
Pipe Stripper	20	0.21	23
Plumber/Pipefitter	20	0.21	24

OCCUPATION	EMPLOYMENT Number	Percent	Relative Error Percent
Refractory Materials Repairer	10	0.10	36
Sheet Metal Worker	30	0.31	34
Stationary Boiler Firer	10	0.10	35
Stationary Engineer	10	0.10	24
Welder/Flamecutter	60	0.63	18
Abrasive Grinder	280	2.93	16
Blockmaking Machine Operator	60	0.63	19
Brick and Tile Machine Operator	10	0.10	31
Cage Maker	20	0.21	20
Concrete Pipe Maker	140	1.46	41
Concrete-Stone Fabricator	120	1.25	22
Contour Grinder	10	0.10	41
Drill Press Operator	10	0.10	17
Grinding Machine Operator, Metal	30	0.31	22
Kiln Operator	150	1.57	15
Lathe Operator, Grinding Wheels	30	0.31	22
Machine Tool Operator, Combination	30	0.31	10
Machine Tool Setter, Metal	10	0.10	36
Sandblaster, Stone	20	0.21	38
Sawyer, Stone	20	0.21	38
Screening Operator	100	1.04	28
Setter/Drawer	90	0.94	30
Splitter	20	0.21	49
Stencil Cutter	30	0.31	49
Stone Cutter, Hand	20	0.21	37
Stone Polisher	20	0.21	40
Tester	70	0.73	14
Press Operator	380	3.97	19
Painter, Production	20	0.21	34
Conveyor Operator/Tender	10	0.10	34
Mixer,Stone/Clay/Glass	130	1.36	14
Concrete Vault Maker	50	0.52	31
Mill/Grinder Operator, Minerals	90	0.94	20
Screen/Stencil Printer/Setter	20	0.21	N/A
Assembler	200	2.09	45
Batch Plant Operator	80	0.84	8
All Other Skilled Workers	130	1.36	N/A
All Other Semiskilled Workers	890	9.30	N/A
All Other Unskilled Workers	860	8.99	N/A
Clerical Occupations	1,610	16.82	N/A
Clerical Supervisor	90	0.94	27
Computer Operator	10	0.10	41
Keypunch Operator	30	0.31	16
Stenographer	10	0.10	36
Accounting Clerk	70	0.73	13
Bookkeeper, Hand	90	0.94	14
File Clerk	40	0.42	35
General Clerk, Office	330	3.45	6
Order Clerk	20	0.21	20

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Payroll/Timekeeping Clerk	100	1.04	27
Personnel Clerk	10	0.10	30
Secretary	170	1.78	14
Switchboard Operator	10	0.10	31
Typist	50	0.52	25
All Other Office Clerical Workers	200	2.09	N/A
Production Clerk/Coordinator	30	0.31	15
Shipping Packer	210	2.19	7
Shipping/Receiving Clerk	50	0.52	34
Stock Clerk	40	0.42	17
Dispatcher, Vehicle	50	0.52	13
Sales Occupations	110	1.15	N/A
TOTAL	9,570	100.00	N/A

N/A Relative Error Not Available

Note: May not add to totals due to rounding.

RANKED OCCUPATIONAL EMPLOYMENT IN CEMENT,CLAY,POTTERY,CONCRETE, STONE,AND MISCELLANEOUS NONMETALLIC MINERAL PRODUCTS INDUSTRIES

SIC 324,325,326,327,328,and 329

	OCCUPATION	EMPLOYMENT
1.	All Other Semiskilled Workers	890
2.	All Other Unskilled Workers	860
3.	Managers and Officers	660
4.	Truck Driver	640
5.	Press Operator	380
6.	General Clerk, Office	330
7.	Supervisor, Nonworking	310
8.	Abrasive Grinder	280
9.	All Other Engineers	220
10.	Mechanic, Maintenance	220
		4,790

These 10 occupations make up 50% of total industry employment.

OCCUPATIONS OF EMPLOYEES
GLASS AND GLASSWARE, PRESSED AND BLOWN (SIC 322)

Reference Date May 1977

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	60	4.72	32
Professional Occupations	20	1.57	N/A
Technical Occupations	10	0.79	N/A
Service Occupations	60	4.72	N/A
Maintenance and Production Occupations	1,070	84.25	N/A
Electrician	10	0.79	27
Industrial Truck Operator	60	4.72	18
Production Packager	140	11.02	24
Furnace/Tank Operator	10	0.79	16
Forming Machine Operator, Glass	80	6.30	20
Forming Machine Maintainer, Glass	40	3.15	22
Polisher, Mold	10	0.79	18
Selector, Glass	320	25.20	19
Cullet Crusher/Washer	10	0.79	31
Metal Mold Maker/Repairer	30	2.36	13
Floor Boy/Girl	30	2.36	20
All Other Skilled Workers	60	4.72	N/A
All Other Semiskilled Workers	240	18.90	N/A
All Other Unskilled Workers	30	2.36	N/A
Clerical Occupations	50	3.94	N/A
TOTAL	1,270	100.00	N/A

N/A Relative Error Not Available

Note: May not add to totals due to rounding.

OCCUPATIONS OF EMPLOYEES
CONCRETE, GYPSUM, AND PLASTER PRODUCTS (SIC 327)

Reference Date May 1977

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	220	9.13	6
Professional Occupations	10	0.41	N/A
Technical Occupations	20	0.83	N/A
Service Occupations	20	0.83	N/A
Janitors, Porters, and Cleaners	10	0.41	13
All Other Service Workers	10	0.41	N/A
Maintenance and Production Occupations	1,820	75.52	N/A
Supervisor, Nonworking	80	3.32	14
Mechanic, Automotive	110	4.56	12
Mechanic, Maintenance	40	1.66	15
Truck Driver	570	23.65	12
Concrete Rubber	30	1.24	31
Delivery and Route Workers	30	1.24	32
Heavy Equipment Operator	50	2.07	22
Industrial Truck Operator	80	3.32	14
Maintenance Repairer, General Utility	40	1.66	12
Pipe Stripper	20	0.83	23
Welders and Flamecutters	30	1.24	14
Blockmaking Machine Operator	60	2.49	19
Cage Maker	20	0.83	20
Concrete-Stone Fabricator	120	4.98	23
Kiln Operator	30	1.24	17
Concrete-Vault Maker	50	2.07	31
Batch Plant Operator	80	3.32	8
All Other Skilled Workers	10	0.41	N/A
All Other Semiskilled Workers	190	7.88	N/A
All Other Unskilled Workers	180	7.47	N/A
Clerical Occupations	240	9.96	N/A
Accounting Clerk	30	1.24	15
Bookkeeper, Hand	70	2.90	10
General Clerk	70	2.90	13
Secretary	20	0.83	15
Dispatcher, Vehicle	50	2.07	13
Sales Occupations	80	3.32	N/A
TOTAL	2,410	100.00	N/A

N/A Relative Error Not Available

Note: May not add to totals due to rounding.

OCCUPATIONS OF EMPLOYEES
ABRASIVE, ASBESTOS, AND MISCELLANEOUS NONMETALIC MINERAL PRODUCTS (SIC 329)

Reference Date May 1977

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	340	5.37	17
Professional Occupations	500	7.90	N/A
Engineers	210	3.32	N/A
Systems Analyst, E.D.P.	20	0.32	34
Purchasing Agent/Buyer	10	0.16	25
Accountants/Auditors	70	1.11	12
Personnel/Labor Relations Specialist	20	0.32	26
All Other Professional Workers	170	2.69	N/A
Technical Occupations	180	2.84	N/A
Computer Programmer	30	0.47	34
Drafter	20	0.32	24
Mechanical Engineering Technician	60	0.95	34
Industrial Engineering Technician	50	0.79	19
All Other Engineering Technicians	20	0.32	35
Service Occupations	120	1.90	N/A
Supervisor, Nonworking Service	20	0.32	26
Janitors, Porters, Cleaners	80	1.26	16
Guards and Doorkeepers	20	0.32	23
Maintenance and Production Occupations	3,870	61.14	N/A
Supervisor, Nonworking	200	3.16	11
Mechanic, Maintenance	170	2.69	7
All Other Mechanics and Repairers	30	0.47	N/A
Truck Driver	30	0.47	14
Carpenter	20	0.32	22
Electrician	30	0.47	26
Industrial Truck Operator	60	0.95	12
Inspector	100	1.58	20
Machinist	30	0.47	25
Millwright	10	0.16	21
Plumber/Pipefitter	20	0.32	24
Sheet Metal Workers	30	0.47	34
Stationary Boiler Firer	10	0.16	35
Welders and Flamecutters	30	0.47	35
Abrasive Grinder	280	4.42	16
Brick and Tile Machine Operator	10	0.16	33
Drill Press Operator	10	0.16	17
Grinding Machine Operator, Metal	20	0.32	34
Kiln Operator	100	1.58	23
Lathe Operator, Grinding Wheel	30	0.47	22
Screener Operator	100	1.58	28
Setter/Drawer	90	1.42	31

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Tester	70	1.11	14
Press Operator	380	6.00	19
Painter, Production	20	0.32	34
Conveyor Operator/Tender	10	0.16	34
Mixer, Stone, Clay, Glass	130	2.05	15
Mill/Grinder Operator	90	1.42	20
All Other Skilled Workers	100	1.58	N/A
All Other Semiskilled Workers	1,020	16.11	N/A
All Other Unskilled Workers	640	10.11	N/A
Clerical Occupations	1,310	20.70	N/A
Clerical Supervisors	90	1.42	27
Computer Operator	10	0.16	41
Keypunch Operator	30	0.47	16
Accounting Clerk	40	0.63	22
File Clerk	40	0.63	35
General Clerk	240	3.79	7
Order Clerk	20	0.32	20
Payroll/Timekeeping Clerk	100	1.58	27
Secretary	130	2.05	18
Typist	50	0.79	26
All Other Office Clerical Occupations	230	3.63	N/A
Production Clerk	30	0.47	15
Shipping Packer	210	3.32	7
Shipping/Receiving Clerk	50	0.79	34
Stock Clerk, Storeroom	40	0.63	17
Sales Occupations	10	0.16	N/A
TOTAL	6,330	100.00	N/A

N/A Relative Error Not Available

Note: May not add to totals due to rounding.

OCCUPATIONS OF EMPLOYEES
FABRICATED METAL PRODUCTS (EXCEPT MACHINERY AND TRANSPORTATION EQUIPMENT (SIC 34)

Reference Date June 1977

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	3,780	7.37	4
Professional Occupations	3,040	5.92	N/A
Civil Engineer	20	0.04	32
Industrial Engineer	120	0.23	21
Mechanical Engineer	770	1.50	9
Metallurgical Engineer	50	0.10	14
All Other Engineers	450	0.88	N/A
Mathematical Scientist	20	0.04	5
Chemist	120	0.23	8
All Other Physical Scientists	20	0.04	N/A
Systems Analyst, EDP	100	0.19	11
Purchasing Agent/Buyer	220	0.43	9
Accountant/Auditor	470	0.92	6
Cost Estimator	140	0.27	15
Writer/Editor	20	0.04	29
Nurse, Professional	50	0.10	12
Personnel/Labor Relations Specialist	90	0.18	13
Designer	50	0.10	22
All Other Professional Workers	330	0.64	N/A
Technical Occupations	1,460	2.85	N/A
Computer Programmer	90	0.18	13
Drafter	590	1.15	12
Tool Programmer, Numerical Control	30	0.06	32
Engineering Technicians	600	1.17	N/A
Science Technicians	40	0.08	10
All Other Technicians	110	0.21	24
Service Occupations	860	1.68	N/A
Supervisor, Nonworking Service	40	0.08	28
Janitors, Porters, and Cleaners	560	1.09	10
Guards and Doorkeepers	190	0.37	20
Food Service Workers	50	0.10	10
All Other Service Workers	20	0.04	26
Maintenance and Production	34,210	66.67	N/A
Supervisor, Nonworking	1,380	2.69	7
Mechanic, Automotive	40	0.08	21
Mechanic, Maintenance	450	0.88	14
All Other Mechanics and Repairers	50	0.10	30
Truck Driver	410	0.80	10
Carpenter	70	0.14	21
Electrician	210	0.41	13
Filers/Grinders/Buffers/Polishers	790	1.54	24
Industrial Truck Operator	360	0.70	13

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Inspector	1,830	3.57	4
Machinist	1,040	2.03	28
Maintenance Repairer, General Utility	150	0.29	23
Helper, Trades	490	0.95	13
Millwright	170	0.33	32
Oiler	70	0.14	17
Painter, Maintenance	20	0.04	30
Electroplater	680	1.33	13
Plumber/Pipefitter	100	0.19	23
Production Packager	880	1.72	15
Sandblaster/Shotblaster	100	0.19	30
Sheet Metal Worker	800	1.56	24
Stationary Boiler Firer	30	0.06	27
Stationary Engineer	50	0.10	15
Tool and Die Maker	590	1.15	12
Die Setter	40	0.08	29
Die Sinker	140	0.27	25
Drill Press Operator	790	1.54	23
Grinding Machine Operator, Metal	600	1.17	28
Heat Treater/Annealer/Temperer	180	0.35	25
Lathe Operator, Metal	1,260	2.46	14
Lay-out Marker, Metal	220	0.43	18
Machine Tool Operator, Combination	1,580	3.08	25
Machine Tool Operator, Numerical Control	60	0.12	35
Machine Tool Operator, Toolroom	170	0.33	21
Plater Helper	500	0.97	19
Sawyer, Metal	70	0.14	34
Tester	290	0.57	12
Painter, Production	600	1.17	13
Punch Press Operator, Metal	1,880	3.66	12
Punch Press Setter, Metal	190	0.37	25
Shear/Slitter Operator, Metal	340	0.66	14
Shear/Slitter Setter	40	0.08	33
Dip Plater, Non-Electrolytic	140	0.27	19
Furnace Operator/Cupola Tender	60	0.12	31
Fitter, Structural Metal	160	0.31	34
Bodymaker Operator, TinCan	20	0.04	33
Furnace Operator Helper	30	0.06	31
Power Brake/Bending Machine Operator	330	0.64	21
Welder, Class A	540	1.05	32
Welder, Class B	540	1.05	18
Welder, Class C	470	0.92	34
Assembler, Class A	670	1.31	25
Assembler, Class C	2,100	4.09	14
All Other Skilled Workers	780	1.52	N/A
All Other Semiskilled Workers	5,600	10.91	N/A
All Other Unskilled Workers	3,060	5.96	N/A
Clerical Occupations	6,130	11.95	N/A
Clerical Supervisor	100	0.19	15

SIC 34 (cont.)

OCCUPATION	EMPLOYMENT Number	EMPLOYMENT Percent	EMPLOYMENT Relative Error Percent
Computer Operator	110	0.21	14
Keypunch Operator	160	0.31	12
All Other Office Machine Operators	90	0.18	N/A
Stenographer	70	0.14	10
Accounting Clerk	420	0.82	8
Bookkeeper, Hand	370	0.72	10
File Clerk	60	0.12	14
General Clerk, Office	600	1.17	10
Order Clerk	140	0.27	16
Payroll/Timekeeping Clerk	180	0.35	10
Personnel Clerk	70	0.14	13
Procurement Clerk	70	0.14	14
Receptionist	30	0.06	28
Secretary	1,100	2.14	5
Statistical Clerk	50	0.10	15
Switchboard Operator	30	0.06	18
Switchboard Operator/Receptionist	120	0.23	12
Typist	270	0.53	13
All Other Office Clerical Workers	440	0.86	6
Production Clerk/Coordinator	380	0.74	15
Shipping Packer	350	0.68	13
Shipping/Receiving Clerk	350	0.68	15
Stock Clerk	480	0.94	8
All Other Plant Clerical Workers	90	0.18	22
Sales Occupations	1,830	3.57	N/A
Sales Representatives	1,790	3.49	6
All Other Sales Occupations	40	0.08	N/A
TOTAL	51,310	100.00	N/A

N/A Relative Error Not Available

Note: May not add to totals due to rounding.

RANKED OCCUPATIONAL EMPLOYMENT IN THE FABRICATED METAL PRODUCTS

SIC 34

OCCUPATION	EMPLOYMENT
1. All Other Semiskilled Workers	5,600
2. Managers and Officers	3,780
3. All Other Unskilled Workers	3,060
4. Assembler, Class - C	2,100
5. Punch Press Operator, Metal	1,880
6. Inspector	1,830
7. Sales Representatives	1,790
8. Machine Tool Operator, Combination . . .	1,580
9. Supervisor, Nonworking	1,380
10. Lathe Operator, Metal	1,260
	24,260

These 10 occupations make up 47% of total industry employment.

OCCUPATIONS OF EMPLOYEES
METAL CANS AND SHIPPING CONTAINERS (SIC 341)

Reference Date June 1977

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	40	3.39	7
Professional Occupations	40	3.39	N/A
Technical Occupations	10	0.85	N/A
Service Occupations	10	0.85	N/A
Maintenance and Production Occupations	1,000	84.75	N/A
Supervisor, Nonworking	60	5.08	10
Truck Driver	30	2.54	29
Electrician	20	1.69	16
Industrial Truck Operator	40	3.39	26
Inspector	50	4.24	42
Machinist	40	3.39	12
Production Packager	80	6.78	12
Sheet Metal Worker	20	1.69	1
Tool & Die Maker	10	0.85	24
Painter, Production	20	1.69	43
Dip Plater	20	1.69	1
Body Maker Operator, Tin Can	20	1.69	33
Welders - B	10	0.85	1
Assembler - A	20	1.69	24
Assembler - C	10	0.85	1
All Other Skilled Workers	40	3.39	N/A
All Other Semiskilled Workers	270	22.88	N/A
All Other Unskilled Workers	240	20.34	N/A
Clerical Occupations	60	5.08	N/A
General Clerk	10	0.85	12
All Other Office Clerical Occupations	30	2.54	N/A
Shipping/Receiving Clerk	10	0.85	32
All Other Plant Clerical Occupations	10	0.85	N/A
Sales Occupations	20	1.69	N/A
TOTALS	1,180	100.00	N/A

N/A Relative Error Not Available

Note: May not add to totals due to rounding.

OCCUPATIONS OF EMPLOYEES
CUTLERY, HAND TOOLS, AND GENERAL HARDWARE (SIC 342)

Reference Date June 1977

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	1,100	8.51	6
Professional Occupations	1,250	9.67	N/A
Electrical Engineer	30	0.23	24
Industrial Engineer	40	0.31	22
Mechanical Engineer	320	2.48	19
All Other Engineers	70	0.54	N/A
Mathematical Scientist	20	0.15	5
Chemist	80	0.62	5
All Other Physical Scientists	20	0.15	N/A
Systems Analyst,E.D.P.	60	0.46	4
Purchasing Agent/Buyer	50	0.39	17
Accountants/Auditors	240	1.86	8
Writer/Editor	10	0.08	24
Nurse, Professional	10	0.08	10
Personnel/Labor Relations Specialist	30	0.23	27
Designer	10	0.08	5
All Other Professional Occupations	260	2.01	N/A
Technical Occupations	420	3.25	N/A
Computer Programmer	50	0.39	7
Drafter	80	0.62	46
Electrical & Electronic Technicians	60	0.46	45
Mechanical Engineering Technicians	40	0.31	28
All Other Engineering Technicians	100	0.77	N/A
Science Technicians	30	0.23	5
All Other Technicians	60	0.46	36
Service Occupations	230	1.78	N/A
Supervisor, Nonworking,Service	20	0.15	25
Janitors, Porters, and Cleaners	130	1.01	16
Guards and Doorkeepers	40	0.31	5
Food Service Workers	40	0.31	5
Maintenance and Production Occupations	6,490	50.23	N/A
Supervisor, Nonworking	280	2.17	19
Mechanic, Maintenance	210	1.63	5
All Other Mechanics and Repairers	10	0.08	3
Truck Driver	30	0.23	50
Carpenter	10	0.08	15
Electrician	50	0.39	7
Industrial Truck Operator	20	0.15	49
Inspectors	520	4.02	6
Millwright	20	0.15	16
Order Filler	60	0.46	38
Painter, Maintenance	10	0.08	13

SIC 342 (cont.)

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Plumber/Pipefitter	10	0.08	4
Production Packager	260	2.01	32
Stationary Engineer	20	0.15	3
Tool and Die Maker	40	0.31	47
Heat Treater, Annealer	90	0.70	40
Milling/Planing Machine Operator	70	0.54	44
Tester	150	1.16	6
Punch-Press Operator, Metal	200	1.55	39
Assembler - C	450	3.48	27
All Other Skilled Workers	590	4.56	N/A
All Other Semiskilled Workers	2,240	17.32	N/A
All Other Unskilled Workers	1,150	8.89	N/A
Clerical Occupations	2,230	17.25	N/A
Clerical Supervisor	60	0.46	13
Computer Operator	50	0.39	18
Keypunch Operator	70	0.54	8
All Other Office Machine Operators	20	0.15	N/A
Stenographer	30	0.23	11
Accounting Clerk	180	1.39	7
File Clerk	40	0.31	6
General Clerk	130	1.01	30
Order Clerk	60	0.46	21
Payroll/Timekeeping Clerk	40	0.31	19
Personnel Clerk	20	0.15	11
Procurement Clerk	20	0.15	14
Secretary	490	3.79	7
Statistical Clerk	30	0.23	2
Switchboard Operator/Receptionist	30	0.23	32
Typist	70	0.54	30
All Other Office Clerical Workers	400	3.09	N/A
Production Clerk	60	0.46	17
Shipping Packer	110	0.85	34
Stock Clerk, Storeroom	250	1.93	7
All Other Plant Clerical Workers	70	0.54	N/A
Sales Occupations	1,200	9.28	N/A
TOTAL	12,920	100.00	N/A

N/A Relative Error Not Available
Note: May not add to totals due to rounding.

OCCUPATIONS OF EMPLOYEES
METAL SERVICES N.E.C. (SIC 347)

Reference Date June 1977

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	370	9.54	4
Professional Occupations	90	2.32	N/A
Mechanical Engineer	20	0.52	21
All Other Engineers	10	0.26	N/A
Chemist	20	0.52	25
Accountants/Auditors	20	0.52	15
All Other Professional Workers	20	0.52	N/A
Technical Occupations	40	1.03	N/A
Drafter	10	0.26	32
All Other Technicians	30	0.77	N/A
Service Occupations	60	1.55	N/A
Janitors, Porters, and Cleaners	50	1.29	17
All Other Service Workers	10	0.26	N/A
Maintenance and Production Occupations	2,900	74.74	N/A
Supervisor, Nonworking	90	2.32	14
Truck Driver	70	1.80	11
Filers, Grinders	240	6.19	15
Inspector	130	3.35	10
Machinist	50	1.29	28
Maintenance Repairer, General Utility	30	0.77	18
Helper, Trades	40	1.03	19
Electroplater	560	14.43	14
Production Packager	60	1.55	24
Sand/Shotblaster	10	0.26	26
Tool and Die Maker	10	0.26	33
Etcher/Engraver	40	1.03	31
Machine Tool Setter, Metal	10	0.26	32
Plater Helper	300	7.73	14
Tester	20	0.52	19
Painter,Production	310	7.99	17
Punch-Press Operator, Metal	40	1.03	32
Shear/Slitter Operator, Metal	20	0.52	24
Dip Plater, Nonelectrolytic	90	2.32	26
All Other Skilled Workers	80	2.06	N/A
All Other Semiskilled Workers	440	11.34	N/A
All Other Unskilled Workers	260	6.70	N/A
Clerical Occupations	370	9.54	N/A
Accounting Clerk	30	0.77	19
Bookkeeper, Hand	60	1.55	10
General Clerk	90	2.32	10
Secretary	50	1.29	10
Typist	10	0.26	31

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
All Other Office Clerical Workers	30	0.77	N/A
Production Clerk	20	0.52	23
Shipping, Packer	30	0.77	23
Shipping/Receiving Clerk	40	1.03	12
All Other Plant Clerical Workers	10	0.26	N/A
Sales Occupations	50	1.29	N/A
TOTAL	3,880	100.00	N/A

N/A Relative Error Not Available

Note: May not add to totals due to rounding.

OCCUPATIONS OF EMPLOYEES
ENGINES AND TURBINES (SIC 351)

Reference Date June 1977

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	370	5.89	2
Professional Occupations	1,000	15.92	N/A
Electrical/Electronic Engineer	20	0.32	12
Industrial Engineer	90	1.43	42
Mechanical Engineer	270	4.30	10
All Other Engineers	30	0.48	N/A
Systems Analyst, Business	10	0.16	9
Purchasing Agent/Buyer	20	0.32	20
Accountants/Auditors	60	0.96	15
Nurse, Professional	10	0.16	3
Personnel/Labor Relations Specialist	10	0.16	5
Designer	180	2.87	13
All Other Professional Workers	300	4.78	13
Technical Occupations	270	4.30	N/A
Computer Programmer	10	0.16	23
Drafter	110	1.75	47
Mechanical Engineering Technician	10	0.16	38
Tool Programmer, Numerical Control	30	0.48	29
Industrial Engineering Technician	80	1.27	8
All Other Engineering Technicians	20	0.32	N/A
All Other Technicians	10	0.16	N/A
Service Occupations	130	2.07	N/A
Janitors, Porters, and Cleaners	90	1.43	10
Guards and Doorkeepers	40	0.64	14
Maintenance and Production Occupations	3,740	59.55	N/A
Supervisor, Nonworking	160	2.55	2
Mechanic, Automotive	10	0.16	13
Mechanic, Maintenance	110	1.75	14
All Other Mechanics and Repairers	170	2.71	N/A
Truck Driver	20	0.32	5
Carpenter	30	0.48	11
Crane, Derrick, and Hoist Operator	70	1.11	14
Electrician	90	1.43	12
Filers, Grinders	130	2.07	11
Gear Forming Machine Operator	90	1.43	14
Rigger	60	0.96	6
Industrial Truck Operator	80	1.27	2
Inspector	220	3.50	7
Machinist	160	2.55	12
Painter,Maintenance	20	0.32	14
Plumber/Pipefitter	90	1.43	8
Sand/Shotblaster	30	0.48	11
Sheet Metal Worker	30	0.48	35

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Stationary Boiler Firer	30	0.48	10
Stationary Engineer	10	0.16	14
Tool and Die Maker	20	0.32	8
Drill-Press Operator	100	1.59	16
Grinding Machine Operator	130	2.07	6
Heat Treater, Annealer	20	0.32	14
Lathe Machine Operator, Metal	260	4.14	2
Lay-out Marker, Metal	20	0.32	3
Machine Tool Operator, Combination	70	1.11	9
Machine Tool Operator, Numerical Control	170	2.71	8
Machine Tool Operator, Tool Room	10	0.16	12
Milling/Planing Machine Operator	170	2.71	6
Sawyer, Metal	10	0.16	14
Tester	70	1.11	14
Woodworking Machine Operator	30	0.48	13
Painter, Production	20	0.32	10
Coil Winder	10	0.16	14
Balancing Machine Operator	20	0.32	20
Welders - A	70	1.11	14
Welders - B	150	2.39	3
Machine Assemblers - A	290	4.62	7
Electro-Mechanical Equipment Assembler - A	40	0.64	13
Machine Assembler - B	30	0.48	14
Electrical/Electronic Assembler - B	20	0.32	14
All Other Skilled Workers	110	1.75	N/A
All Other Semiskilled Workers	130	2.07	N/A
All Other Unskilled Workers	160	2.55	N/A
Clerical Occupations	770	12.26	N/A
Clerical Supervisor	20	0.32	34
Computer Operator	10	0.16	20
Keypunch Operator	40	0.64	7
All Other Office Machine Operators	20	0.32	N/A
Stenographer	70	1.11	6
Accounting Clerk	30	0.48	8
General Clerk	60	0.96	15
Payroll/Timekeeping Clerk	10	0.16	16
Procurement Clerk	10	0.16	25
Secretary	110	1.75	7
Typist	30	0.48	11
All Other Office Clerical Workers	90	1.43	N/A
Production Clerk	100	1.59	7
Shipping Packer	10	0.16	11
Shipping/Receiving Clerk	20	0.32	10
Stock Clerk, Storeroom	90	1.43	8
All Other Plant Clerical Workers	50	0.80	14
TOTAL	6,280	100.00	N/A

N/A Relative Error Not Available.

Note: May not add to totals due to rounding.

OCCUPATIONS OF EMPLOYEES
CONSTRUCTION AND RELATED MACHINERY (SIC 353)

Reference Date June 1977

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	80	7.92	10
Professional Occupations	80	7.92	N/A
Mechanical Engineer	30	2.97	20
All Other Engineers	20	1.98	N/A
Accountants/Auditors	20	1.98	20
All Other Professional Workers	10	0.99	N/A
Technical Occupations	50	4.95	N/A
Drafter	40	3.96	22
All Other Technicians	10	0.99	N/A
Service Occupations	10	0.99	N/A
Maintenance and Production Occupations	630	62.38	N/A
Supervisor, Nonworking	30	2.97	19
Tool and Die Maker	20	1.98	22
Drill-Press Operator	20	1.98	22
Grinding Machine Operator, Metal	30	2.97	33
Lathe Machine Operator, Metal	30	2.97	21
Lay-out Marker, Metal	30	2.97	13
Machine Tool Operator, Combination	40	3.96	25
Machine Tool Operator, Numerical Control	10	0.99	29
Milling/Planing Machine Operator	10	0.99	29
Painter, Production	20	1.98	19
Welders - A	30	2.97	29
Welders - B	50	4.95	26
Welders - C	20	1.98	26
Machine Assembler - A	20	1.98	26
Machine Assembler - B	20	1.98	15
Assembler - C	40	3.96	31
All Other Skilled Workers	110	10.89	N/A
All Other Semiskilled Workers	90	8.91	N/A
All Other Unskilled Workers	10	0.99	N/A
Clerical Occupations	130	12.87	N/A
General Clerk	30	2.97	18
Secretary	30	2.97	11
All Other Office Clerical Workers	20	1.98	N/A
Production Clerk	10	0.99	13
Stock Clerk, Storeroom	20	1.98	19
All Other Plant Clerical Workers	20	1.98	N/A
Sales Occupations	30	2.97	15
TOTAL	1,010	100.00	N/A

N/A Relative Error Not Available
Note: May not add to totals due to rounding.

OCCUPATIONS OF EMPLOYEES
HOUSEHOLD APPLIANCES (SIC 363)

Reference Date June 1977

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	90	7.03	25
Professional Occupations	80	6.25	N/A
Technical Occupations	30	2.34	N/A
Service Occupations	20	1.56	N/A
Maintenance and Production Occupations	900	70.31	N/A
Supervisor, Nonworking	60	4.69	16
Electrician	10	0.78	12
Machinist	20	1.56	24
Tool and Die Maker	30	2.34	22
Machine Tool Setter, Metal	30	2.34	22
All Other Skilled Workers	10	0.78	N/A
All Other Semiskilled Workers	460	35.94	N/A
All Other Unskilled Workers	280	21.88	N/A
Clerical Occupations	140	10.94	N/A
Secretary	20	1.56	32
All Other Office Clerical Workers	80	6.25	N/A
Production Clerk	20	1.56	32
All Other Plant Clerical Workers	20	1.56	N/A
Sales Occupations	20	1.56	N/A
TOTAL	1,280	100.00	N/A

N/A Relative Error Not Available

Note: May not add to totals due to rounding.

OCCUPATIONS OF EMPLOYEES
COMMUNICATIONS EQUIPMENT (SIC 366)

Reference Date June 1977

OCCUPATIONS	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	1,250	5.04	18
Professional Occupations	6,040	24.36	N/A
Electrical/Electronic Engineer	3,440	13.88	25
Industrial Engineer	190	0.77	21
All Other Engineers	520	2.10	N/A
Systems Analyst, Business	150	0.61	20
Systems Analyst, Scientific	90	0.36	20
Purchasing Agent/Buyer	140	0.56	25
Nurse, Professional	20	0.08	11
Personnel/Labor Relations Specialist	70	0.28	20
All Other Professional Workers	1,420	5.73	N/A
Technical Occupations	2,280	9.20	N/A
Drafter	520	2.10	9
Electrical/Electronic Technicians	1,100	4.44	25
Mechanical Engineering Technicians	110	0.44	33
All Other Technicians	550	2.22	N/A
Service Occupations	370	1.49	N/A
Supervisor, Nonworking, Service	30	0.12	19
Guards and Doorkeepers	190	0.77	18
All Other Service Workers	150	0.61	N/A
Maintenance and Production Occupations	10,610	42.80	N/A
Supervisor, Nonworking	560	2.26	13
Mechanic, Maintenance	80	0.32	7
All Other Mechanics and Repairers	40	0.16	N/A
Truck Driver	10	0.04	35
Carpenter	40	0.16	29
Electrician	90	0.36	10
Inspector	990	3.99	24
Machinist	150	0.61	28
Millwright	50	0.20	17
Painter, Maintenance	20	0.08	30
Plumber/Pipefitter	60	0.24	29
Stationary Boiler Firer	10	0.04	30
Stationary Engineer	20	0.08	27
Tool and Die Maker	210	0.85	14
Tester	750	3.03	28
Wirer, Electronic	890	3.59	20
Screen, Stencil Printer/Setter	50	0.20	23
Assembler - C	2,190	8.83	31
All Other Skilled Workers	1,040	4.20	N/A
All Other Semiskilled Workers	2,060	8.31	N/A
All Other Unskilled Workers	1,300	5.24	N/A

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Clerical Occupations	4,220	17.02	N/A
Clerical Supervisor	130	0.52	27
Computer Operator	100	0.40	17
Keypunch Operator	90	0.36	12
All Other Office Machine Operators	100	0.40	N/A
General Clerk	520	2.10	31
Personnel Clerk	30	0.12	25
Secretary	610	2.46	19
Typist	170	0.69	21
All Other Office Clerical Workers	1,370	5.53	N/A
Production Clerk	410	1.65	18
Shipping Packer	130	0.52	31
Shipping/Receiving Clerk	80	0.32	33
Stock Clerk Storeroom	340	1.37	18
All Other Plant Clerical Workers	140	0.56	26
Sales Occupations	20	0.08	N/A
TOTAL	24,790	100.00	N/A

N/A Relative Error Not Available

Note: May not add to totals due to rounding.

OCCUPATIONS OF EMPLOYEES
AIRCRAFTS AND PARTS (SIC 372)

Reference Date June 1977

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	1,000	11.93	2
Professional Occupations	1,960	23.39	N/A
Aeronautical Engineer	30	0.36	10
Civil Engineer	30	0.36	10
Electrical/Electronic Engineer	30	0.36	7
Industrial Engineer	220	2.63	9
Mechanical Engineer	560	6.68	7
Metal Engineer	10	0.12	10
All Other Engineers	100	1.19	N/A
Mathematician	40	0.48	10
Physicist	10	0.12	10
Systems Analyst, Business	30	0.36	10
Purchasing Agent/Buyer	50	0.60	15
Accountants/Auditors	210	2.51	4
Commercial Artist	30	0.36	5
Writer/Editor	40	0.48	6
Personnel/Labor Relations Specialist	20	0.24	10
Designer	140	1.67	10
All Other Professional Workers	410	4.89	N/A
Technical Occupations	570	6.80	N/A
Computer Programmer	20	0.24	10
Drafter	120	1.43	11
Electrical/Electronic Technician	70	0.84	10
Mechanical Engineering Technician	40	0.48	6
Tool Programmer, Numerical Control	30	0.36	26
Industrial Engineering Technician	210	2.51	10
All Other Engineering Technicians	70	0.84	10
All Other Technicians	10	0.12	10
Service Occupations	70	0.84	N/A
Maintenance and Production Occupations	3,780	45.11	N/A
Maintenance, Mechanic	40	0.48	6
All Other Mechanics and Repairers	50	0.60	10
Electrician	20	0.24	5
Filers, Grinders	120	1.43	5
Inspector	440	5.25	3
Instrument Mechanic	10	0.12	10
Machinist	390	4.65	7
Oiler	10	0.12	10
Plumber/Pipefitter	30	0.36	10
Sheet Metal Worker	280	3.34	5
Tool and Die Maker	120	1.43	3
Drill-Press Operator	50	0.60	28
Grinding Machine Operator	190	2.27	7

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Heat Treater, Annealer	50	0.60	5
Lathe Machine Operator, Metal	280	3.34	11
Machine Tool Operator, Combination	70	0.84	34
Machine Tool Operator, Numerical Control	240	2.86	7
Machine Tool Operator, Tool Room	60	0.72	6
Milling/Planing Machine Operator	150	1.79	12
Tester	160	1.91	10
Punch-Press Setter	130	1.55	10
Welders - B	220	2.63	10
Machine Assemblers - A	110	1.31	10
Machine Assemblers - B	240	2.86	10
All Other Skilled Workers	150	1.79	N/A
All Other Semiskilled Workers	110	1.31	N/A
All Other Unskilled Workers	60	0.72	N/A
Clerical Occupations	980	11.69	N/A
Computer Operator	30	0.36	10
Keypunch Operator	30	0.36	10
Peripheral EDP Equipment Operator	10	0.12	10
All Other Office Machine Operators	20	0.24	16
Stenographer	80	0.95	10
Accounting Clerk	40	0.48	16
General Clerk	50	0.60	11
Procurement Clerk	40	0.48	10
Secretary	230	2.74	3
Typist	40	0.48	6
All Other Office Clerical Workers	70	0.84	N/A
Production Clerk	150	1.79	2
Shipping Packer	40	0.48	10
Shipping/Receiving Clerk	20	0.24	43
Stock Clerk, Storeroom	110	1.31	7
All Other Plant Clerical Workers	20	0.24	10
Sales Occupations	20	0.24	N/A
TOTAL	8,380	100.00	N/A

N/A Relative Error Not Available.

Note: May not add to totals due to rounding.

OCCUPATIONS OF EMPLOYEES
MEASURING,ANALYZING,AND CONTROLLING INSTRUMENTS; PHOTOGRAPHIC,MEDICAL AND OPTICAL GOODS; WATCHES AND CLOCKS (SIC 38)

Reference Date June 1977

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	3,890	7.65	11
Professional Occupations	7,890	15.53	N/A
Electrical/Electronic Engineer	1,790	3.52	20
Industrial Engineer	220	0.43	43
Mechanical Engineer	660	1.30	33
Metallurgical Engineer	30	0.06	29
All Other Engineers	1,920	3.78	N/A
Chemist	90	0.18	34
All Other Physical Scientists	330	0.65	N/A
Systems Analyst, EDP	260	0.51	22
Purchasing Agent/Buyer	340	0.67	12
Accountant/Auditor	340	0.67	13
Cost Estimator	260	0.51	14
Writer/Editor	190	0.37	37
Nurse, Professional	50	0.10	13
Personnel and Labor Relations Specialist	220	0.43	9
Designer	320	0.63	39
All Other Professional Workers	870	1.71	N/A
Technical Occupations	4,940	9.72	N/A
Computer Programmer	340	0.67	43
Drafter	750	1.48	12
Electrical/Electronic Technician	1,100	2.16	41
Mechanical Engineering Technician	660	1.30	24
Tool Programmer, Numerical Control	30	0.06	21
Industrial Engineering Technician	30	0.06	43
All Other Engineering Technicians	920	1.81	23
Science Technicians	730	1.44	16
All Other Technicians	380	0.75	29
Service Occupations	940	1.85	N/A
Supervisor, Nonworking Service	70	0.14	38
Janitors, Porters, and Cleaners	570	1.12	9
Guards and Doorkeepers	280	0.55	10
All Other Service Workers	20	0.04	N/A
Maintenance and Production Occupations	25,110	49.41	N/A
Supervisor, Nonworking	1,670	3.29	9
Mechanic, Maintenance	220	0.43	15
All Other Mechanics and Repairers	510	1.00	N/A
Carpenter	80	0.16	20
Electrician	250	0.49	12
Filers/Grinders/Buffers/Polishers	60	0.12	33
Inspector	1,550	3.05	14

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Instrument Mechanic	70	0.14	17
Lens Grinder	340	0.67	32
Machinist	930	1.83	34
Maintenance Repairer, General Utility	150	0.30	17
Helper, Trades	80	0.16	34
Oiler	20	0.04	29
Order Filler	150	0.30	26
Painter, Maintenance	50	0.10	34
Plumber/Pipefitter	130	0.26	18
Production Packager	620	1.22	23
Sewing Machine Operator, Regular Equipment, Nongarment	50	0.10	45
Sheet Metal Worker	30	0.06	50
Stationary Engineer	30	0.06	31
Tool and Die Maker	380	0.75	17
Welder/Flamecutter	310	0.61	29
Chemical Operator, Class A	90	0.18	26
Lathe Operator, Metal	400	0.79	43
Lay-Out Marker, Metal	20	0.04	46
Machine Tool Operator, Combination	850	1.67	25
Machine Tool Operator, Numerical Control	80	0.16	43
Machine Tool Operator, Tool Room	70	0.14	30
Milling/Planing Machine Operator	120	0.24	38
Tester	480	0.94	50
Printer, Production	180	0.35	21
Punch Press Operator, Metal	90	0.18	39
Punch Press Setter, Metal	20	0.04	36
Shear/Slitter Operator, Metal	40	0.08	43
Compression/Injection Molding Machine Operator, Plastics	210	0.41	5
Dip Plater, Non-Electrolytic	80	0.16	27
Chief Operator	180	0.35	23
Power Brake/Bending Machine Operator	30	0.06	43
Instrument Maker, Class A	180	0.35	23
Electro-Mechanical Equipment Assembler	210	0.41	42
Electrical and Electronic Assembler, Class A	450	0.89	40
All Other Assemblers, Class A	680	1.34	N/A
Instrument Assembler, Class B	630	1.24	47
All Other Assemblers, Class B	2,660	5.23	N/A
Assembler, Class C	2,010	3.96	17
All Other Skilled Workers	960	1.89	N/A
All Other Semiskilled Workers	6,260	12.32	N/A
All Other Unskilled Workers	450	0.89	N/A
Clerical Occupations	7,490	14.74	N/A
Clerical Supervisor	220	0.43	39
Bookkeeping/Billing Machine Operator	30	0.06	35
Computer Operator	110	0.22	26
Keypunch Operator	210	0.41	14
Peripheral EDP Equipment Operator	60	0.12	24
All Other Office Machine Operators	90	0.18	N/A

OCCUPATION	EMPLOYMENT Number	Percent	Relative Error Percent
Accounting Clerk	520	1.02	17
Bookkeeper, Hand	160	0.31	28
General Clerk, Office	770	1.52	27
Order Clerk	240	0.47	32
Payroll/Timekeeping Clerk	100	0.20	16
Personnel Clerk	80	0.16	15
Procurement Clerk	100	0.20	35
Receptionist	30	0.06	26
Secretary	1,580	3.11	10
Switchboard Operator	90	0.18	17
Typist	530	1.04	30
All Other Office Clerical Workers	580	1.14	N/A
Production Clerk/Coordinator	530	1.04	28
Shipping Packer	360	0.71	15
Shipping/Receiving Clerk	340	0.67	16
Stock Clerk	530	1.04	25
All Other Plant Clerical Workers	230	0.45	34
Sales Occupations	560	1.10	N/A
Sales Representative	550	1.08	23
All Other Sales Workers	10	0.02	N/A
TOTAL	50,820	100.00	N/A

N/A Relative Error Not Available

Note: May not add to totals due to rounding.

RANKED OCCUPATIONAL EMPLOYMENT IN MEASURING, ANALYZING, AND CONTROLLING INSTRUMENTS; PHOTOGRAPHIC, MEDICAL, AND OPTICAL GOODS; AND WATCHES AND CLOCKS INDUSTRIES

SIC 38

	OCCUPATION	EMPLOYMENT
1.	All Other Semiskilled Workers	6,260
2.	Managers and Officers	3,890
3.	All Other Assemblers, Class - B	2,660
4.	Assembler, Class - C	2,010
5.	All Other Engineers	1,920
6.	Electrical/Electronic Engineer	1,790
7.	Supervisor, Nonworking	1,670
8.	Secretary	1,580
9.	Inspector	1,550
10.	Electrical/Electronic Technician	1,100
		24,430

These 10 occupations make up 48% of total industry employment.

OCCUPATIONS OF EMPLOYEES
MEASURING AND CONTROLLING INSTRUMENTS (SIC 382)

Reference Date June 1977

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	1,180	7.08	36
Professional Occupations	3,060	18.36	N/A
Electrical/Electronic Engineer	860	5.16	30
All Other Engineers	1,010	6.06	N/A
Systems Analyst, E.D.P.	110	0.66	49
Purchasing Agent/Buyer	100	0.60	35
Accountants/Auditors	110	0.66	21
Nurse, Professional	20	0.12	21
Personnel/Labor Relations Specialist	60	0.36	27
All Other Professional Workers	790	4.74	N/A
Technical Occupations	1,510	9.06	N/A
Drafter	280	1.68	25
All Other Technicians	1,230	7.38	N/A
Service Occupations	340	2.04	N/A
Janitors, Porters, and Cleaners	230	1.38	20
Guards and Doorkeepers	70	0.42	25
All Other Service Workers	40	0.24	N/A
Maintenance and Production Occupations	7,490	44.93	N/A
Supervisor, Nonworking	400	2.40	30
Truck Drivers	20	0.12	34
Inspectors	440	2.64	34
Tool and Die Maker	150	0.90	33
Welders and Flamecutters	110	0.66	49
Grinding Machine Operator, Metal	30	0.18	47
Machine Tool Operator, Combination	370	2.22	41
Painter,Production	70	0.42	41
All Other Assemblers - B	2,310	13.86	N/A
All OtherSkilled Workers	1,480	8.88	N/A
All Other Semiskilled Workers	1,850	11.10	N/A
All Other Unskilled Workers	260	1.56	N/A
Clerical Occupations	2,990	17.94	N/A
Keypunch Operator	80	0.48	30
Peripheral E.D.P. Equipment Operator	30	0.18	48
All Other Office Machine Operator	100	0.60	N/A
Accounting Clerk	140	0.84	40
Payroll/Timekeeping Clerk	40	0.24	35
Personnel Clerk	20	0.12	41
Secretary	450	2.70	31
Switchboard Operator	40	0.24	32
Typist	350	2.10	45
All Other Office Clerical Workers	880	5.28	N/A
Shipping Packer	60	0.36	47

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Shipping/Receiving Clerk	120	0.72	38
Stock Clerk, Storeroom	310	1.86	42
All Other Plant Clerical Workers	370	2.22	N/A
Sales Occupations	110	0.66	N/A
TOTAL	16,670	100.00	N/A

N/A Relative Error Not Available

Note: May not add to totals due to rounding.

OCCUPATIONS OF EMPLOYEES
OPHTHALMIC GOODS (SIC 385)

Reference Date June 1977

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	340	5.84	7
Professional Occupations	280	4.81	N/A
Industrial Engineer	20	0.34	19
Mechanical Engineer	70	1.20	1
All Other Engineers	30	0.52	N/A
Physicist	10	0.17	16
Purchasing Agent/Buyer	20	0.34	10
Accountants/Auditors	20	0.34	12
Cost Estimator	10	0.17	1
Personnel/Labor Relations Specialist	10	0.17	1
Designer	20	0.34	29
All Other Professional Workers	70	1.20	N/A
Technical Occupations	160	2.75	N/A
Computer Programmer	20	0.34	8
Drafter	20	0.34	11
Mechanical Engineering Technician	30	0.52	1
All Other Engineering Technicians	50	0.86	8
All Other Technicians	40	0.69	N/A
Service Occupations	120	2.06	N/A
Janitors, Porters, and Cleaners	70	1.20	8
Guards and Doorkeepers	40	0.69	23
All Other Service Workers	10	0.17	N/A
Maintenance and Production Occupations	4,000	68.73	N/A
Supervisor, Nonworking	170	2.92	12
Mechanic, Maintenance	50	0.86	1
Carpenter	10	0.17	1
Electrician	20	0.34	9
Filers, Grinders	30	0.52	30
Inspector	320	5.50	14
Lens Grinder	250	4.30	42
Machinist	90	1.55	12
Maintenance Repairer,General Utility	30	0.52	20
Order Filler	50	0.86	36
Production Packager	40	0.69	43
Stationary Engineer	10	0.17	19
Tool and Die Maker	70	1.20	1
Machine Tool Operator, Combination	20	0.34	20
Machine Tool Operator, Toolroom	30	0.52	15
Painter, Production	20	0.34	1
Compression/Injection Molder	120	2.06	1
Electrical and Electronic Assembler - B	10	0.17	1
Assembler - C	140	2.41	30
All Other Skilled Workers	340	5.84	N/A

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
All Other Semiskilled Workers	2,020	34.71	N/A
All Other Unskilled Workers	160	2.75	N/A
Clerical Occupations	870	14.95	N/A
Clerical Supervisor	40	0.69	32
Computer Operator	20	0.34	1
Keypunch Operator	50	0.86	3
Peripheral E.D.P. Equipment Operator	30	0.52	1
All Other Office Machine Operators	20	0.34	N/A
Accounting Clerk	110	1.89	13
General Clerk	30	0.52	48
Order Clerk	50	0.86	19
Payroll/Timekeeping Clerk	30	0.52	7
Personnel Clerk	10	0.17	15
Procurement Clerk	10	0.17	16
Secretary	110	1.89	7
Switchboard Operator	10	0.17	23
All Other Office Clerical Workers	120	2.06	N/A
Production Clerk	30	0.52	7
Shipping Packer	20	0.34	32
Shipping/Receiving Clerk	80	1.37	32
Stock Clerk, Storeroom	90	1.55	2
All Other Plant Clerical Workers	10	0.17	N/A
Sales Occupations	50	0.86	N/A
TOTAL	5,820	100.00	N/A

N/A Relative Error Not Available

Note: May not add to totals due to rounding.

OCCUPATIONS OF EMPLOYEES
PHOTOGRAPHIC EQUIPMENT AND SUPPLIES (SIC 386)

Reference Date June 1977

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	850	6.42	11
Professional Occupations	2,170	16.38	N/A
Industrial Engineer	20	0.15	21
All Other Engineers	1,080	8.15	N/A
Physicist	10	0.08	29
All Other Physical Scientists	210	1.58	N/A
Systems Analyst,E.D.P.	80	0.60	24
Purchasing Agent/Buyer	80	0.60	13
Accountant/Auditor	90	0.68	28
Cost Estimator	140	1.06	17
Writer/Editor	20	0.15	5
Nurse, Professional	10	0.08	13
Personnel/Labor Relations Specialist	110	0.83	9
Designer	90	0.68	20
All Other Professional Workers	230	1.74	N/A
Technical Occupations	1,670	12.60	N/A
Computer Programmer	50	0.38	31
Drafter	200	1.51	15
Electrical and Electronic Technician	30	0.23	32
Mechanical Engineering Technician	310	2.34	25
Tool Programmer, Numerical Control	20	0.15	25
All Other Engineering Technicians	390	2.94	N/A
Science Technicians	550	4.15	18
All Other Technicians	120	0.91	N/A
Service Occupations	300	2.26	N/A
Supervisor, Nonworking,Service	20	0.15	30
Janitors, Porters, Cleaners	130	0.98	15
Guards and Doorkeepers	150	1.13	9
Maintenance and Production Occupations	6,740	50.87	N/A
Supervisor, Nonworking	690	5.21	9
Mechanic,Maintenance	70	0.53	21
All Other Mechanics and Repairers	460	3.47	15
Carpenter	40	0.30	15
Electrician	160	1.21	14
Inspector	420	3.17	32
Instrument Mechanic	50	0.38	14
Machinist	110	0.83	11
Maintenance Repairers, General Utility	10	0.08	11
Helper, Trades	40	0.30	25
Oiler	10	0.08	17
Painter, Maintenance	10	0.08	16
Plumber/Pipefitter	90	0.68	20
Production Packager	310	2.34	29

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Stationary Engineer	20	0.15	45
Tool and Die Maker	50	0.38	13
Chemical Operator - A	70	0.53	27
Shear/Slitter Operator, Metal	40	0.30	43
Dip Plater, Non-Electrolytic	50	0.38	23
Chief Operator	170	1.28	23
Instrument Maker - A	100	0.75	25
All Other Assemblers - A	190	1.43	21
All Other Skilled Workers	220	1.66	N/A
All Other Semiskilled Workers	3,160	23.85	N/A
All Other Unskilled Workers	200	1.51	N/A
Clerical Occupations	1,480	11.17	N/A
Keypunch Operator	20	0.15	41
General Clerk	340	2.57	9
Order Clerk	40	0.30	49
Personnel Clerk	30	0.23	26
Secretary	510	3.85	9
Switchboard Operator	30	0.23	32
All Other Office Clerical Workers	130	0.98	N/A
Production Clerk	100	0.75	18
Shipping Packer	160	1.21	23
Shipping/Receiving Clerk	20	0.15	38
All Other Plant Clerical Workers	100	0.75	N/A
Sales Occupations	40	0.30	N/A
TOTAL	13,250	100.00	N/A

N/A Relative Error Not Available

Note: May not add to totals due to rounding.

OCCUPATIONS OF EMPLOYEES
WATCHES, CLOCKS, AND WATCHCASES (SIC 387)

Reference Date June 1977

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	60	3.47	N/A
Professional Occupations	110	6.36	N/A
Industrial Engineer	20	1.16	4
Mechanical Engineer	20	1.16	18
All Other Engineers	20	1.16	N/A
Purchasing Agent/Buyer	10	0.58	10
Accountants/Auditors	10	0.58	26
All Other Professional Workers	30	1.73	N/A
Technical Occupations	20	1.16	N/A
Service Occupations	40	2.31	N/A
Janitors, Porters, and Cleaners	20	1.16	8
All Other Service Workers	20	1.16	N/A
Maintenance and Production Occupations	1,300	75.14	N/A
Supervisor, Nonworking	50	2.89	14
All Other Mechanics and Repairers	10	0.58	N/A
Inspector	70	4.05	8
Machinist	40	2.31	9
Tool and Die Maker	50	2.89	5
Lathe Machine Operator, Metal	50	2.89	6
Machine Tool Operator, Combination	60	3.47	49
Machine Tool Setter, Metal	40	2.31	10
Painter,Production	50	2.89	32
Punch Press Operator, Metal	40	2.31	22
Punch Press Setter, Metal	20	1.16	37
Compression/Injection Molder	60	3.47	5
Assembler - C	510	29.48	11
All Other Skilled Workers	30	1.73	N/A
All Other Semiskilled Workers	190	10.98	N/A
All Other Unskilled Workers	30	1.73	N/A
Clerical Occupations	190	10.98	N/A
Clerical Supervisor	10	0.58	47
Accounting Clerk	20	1.16	19
General Clerk	10	0.58	13
Secretary	20	1.16	16
All Other Office Clerical Workers	40	2.31	N/A

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Production Clerk	40	2.31	4
Shipping Packer	30	1.73	4
Stock Clerk, Storeroom	20	1.16	20
Sales Occupations	10	0.58	N/A
TOTAL	1,730	100.00	N/A

N/A Relative Error Not Available

Note: May not add to totals due to rounding.

OCCUPATIONS OF EMPLOYEES
MISCELLANEOUS MANUFACTURING INDUSTRIES (SIC 39)

Reference Date June 1977

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	1,740	6.90	8
Professional Occupations	690	2.74	N/A
Industrial Engineer	70	0.28	14
Mechanical Engineer	60	0.24	18
Chemist	10	0.04	18
Systems Analyst, EDP	30	0.12	17
Purchasing Agent/Buyer	110	0.44	12
Accountant/Auditor	130	0.52	13
Nurse, Professional	10	0.04	23
Personnel/Labor Relations Specialist	40	0.16	18
Designer	190	0.75	17
All Other Professional Workers	40	0.16	N/A
Technical Occupations	210	0.83	N/A
Computer Programmer	60	0.24	12
Drafter	20	0.08	31
Engineering Technicians	110	0.44	N/A
Science Technicians	10	0.04	19
All Other Technicians	10	0.04	N/A
Service Occupations	470	1.86	N/A
Supervisor, Nonworking Service	60	0.24	17
Janitors, Porters, and Cleaners	240	0.95	10
Guards and Doorkeepers	70	0.28	19
Food Service Workers	30	0.12	31
All Other Service Workers	70	0.28	19
Maintenance and Production Occupations	17,030	67.55	N/A
Supervisor, Nonworking	670	2.66	7
Mechanics and Repairers	120	0.48	N/A
Truck Driver	50	0.20	19
Cabinetmaker	50	0.20	29
Delivery/Route Worker	20	0.08	31
Electrician	70	0.28	15
Filers/Grinders/Buffers/Polishers	450	1.79	17
Inspector	360	1.43	13
Machinist	140	0.56	20
Maintenance Repairer, General Utility	160	0.63	24
Helper, Trades	60	0.24	34
Millwright	50	0.20	11
Order Filler	220	0.87	17
Electroplater	130	0.52	10
Plumber/Pipefitter	20	0.08	19
Press Operator	90	0.36	25
Production Packager	1,150	4.56	22
Tool and Die Maker	230	0.91	11

SIC 39 (cont.)

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Welder/Flamecutter	180	0.71	33
Bench Hand, Jewelry	910	3.61	18
Caster	70	0.28	23
Chaser, Jewelry or Silverware	40	0.16	22
Etcher/Engraver	110	0.44	18
Grinding Machine Operator, Metal	470	1.86	21
Heat Treater/Annealer	30	0.12	19
Lathe Operator, Metal	40	0.16	33
Machine Tool Operator, Numerical Control	20	0.08	72
Machine Tool Operator, Tool Room	40	0.16	22
Machine Tool Setter, Metal	100	0.40	19
Metal Mold Maker	30	0.12	19
Plater Helper	190	0.75	23
Roller	40	0.16	14
Rubber Mold Maker	30	0.12	20
Spinner	60	0.24	16
Stone Setter	140	0.56	22
Vulcanizer, Rubber Plate	50	0.20	18
Painter, Production	160	0.63	31
Punch Press Operator, Metal	410	1.63	22
Punch Press Setter, Metal	90	0.36	26
Dip Plater, Non-Electrolytic	20	0.08	34
Assembler, Class C	2,350	9.32	13
Decorator, Hand	120	0.48	21
Vacum Plastic Forming Machine Operator	10	0.04	18
All Other Skilled Workers	1,210	4.80	N/A
All Other Semiskilled Workers	3,510	13.92	N/A
All Other Unskilled Workers	2,560	10.15	15
Clerical Occupations	4,090	16.22	N/A
Clerical Supervisor	13	0.52	15
Bookkeeping/Billing Machine Operator	90	0.36	29
Computer Operator	80	0.32	12
Keypunch Operator	140	0.56	14
All Other Office Machine Operators	50	0.20	N/A
Stenographer	40	0.16	27
Accounting Clerk	220	0.87	10
Bookkeeper, Hand	150	0.60	18
File Clerk	100	0.40	16
General Clerk, Office	540	2.14	10
Order Clerk	190	0.75	17
Payroll/Timekeeping Clerk	180	0.71	11
Personnel Clerk	50	0.20	12
Procurement Clerk	70	0.28	14
Receptionist	10	0.04	30
Secretary	340	1.35	16
Statistical Clerk	40	0.16	28
Switchboard Operator	10	0.04	27
Switchboard Operator/Receptionist	70	0.28	16
Typist	140	0.56	13

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
All Other Office Clerical Workers	90	0.36	25
Production Clerk/Coordinator	300	1.19	8
Shipping Packer	560	2.22	12
Shipping/Receiving Clerk	230	0.91	20
Stock Clerk	180	0.71	13
All Other Plant Clerical Workers	90	0.36	25
Sales Occupations	980	3.89	N/A
Sales Representative	930	3.69	10
Sales Clerk	50	0.20	33
TOTAL	25,210	100.00	N/A

N/A Relative Error Not Available

Note: May not add to totals due to rounding.

RANKED OCCUPATIONAL EMPLOYMENT IN MISCELLANEOUS MANUFACTURING INDUSTRIES

SIC 39

	OCCUPATION	EMPLOYMENT
1.	All Other Semiskilled Workers	3,510
2.	All Other Undkilled Workers	2,560
3.	Assembler, Class - C	2,350
4.	Managers and Officers	1,740
5.	All Other Skilled Workers	1,210
6.	Production Packager	1,150
7.	Sales Representatives	930
8.	Bench Hand, Jewelry	910
9.	Supervisor, Nonworking	670
10.	Shipping Packer	560
		15,590

These 10 occupations make up 62% of total industry employment.

OCCUPATIONS OF EMPLOYEES
JEWELRY, SILVERWARE, AND PLATED WARE (SIC 391)

Reference Date May, 1977

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	450	5.59	15
Professional Occupations	150	1.86	N/A
Industrial Engineer	20	0.25	11
All Other Engineers	10	0.12	N/A
Purchasing Agent/Buyer	20	0.25	6
Accountants/Auditors	30	0.37	14
Personnel/Labor Relations Specialist	10	0.12	10
Designer	40	0.50	9
All Other Professional Workers	20	0.25	N/A
Technical Occupations	60	0.75	N/A
Computer Programmer	20	0.25	15
All Other Engineering Technicians	40	0.50	N/A
Service Occupations	230	2.86	N/A
Supervisor, Nonworking Service	50	0.62	5
Janitors, Porters, and Cleaners	120	1.49	14
Guards and Doorkeepers	50	0.62	17
Food Service Workers	10	0.12	30
Maintenance and Production Occupations	5,190	64.47	N/A
Supervisor, Nonworking	300	3.73	5
Mechanics and Repairers	10	0.12	N/A
Truck Driver	20	0.25	17
Carpenter	30	0.37	9
Electrician	20	0.25	15
Filers, Grinders	340	4.22	16
Inspector	190	2.36	11
Jeweler/Silversmith	30	0.37	49
Machinist	60	0.75	13
Maintenance Repairer, General Utility	70	0.87	29
Helper, Trades	10	0.12	27
Order Filler	60	0.75	21
Electroplater	80	0.99	13
Plumber/Pipefitter	10	0.12	26
Press Operator	20	0.25	7
Production Packager	310	3.85	18
Tool and Die Maker	140	1.74	13
Welders and Flamecutters	100	1.24	38
Bench Hand, Jewelry	390	4.84	19
Caster	60	0.75	25
Chaser, Jewelry/Silver	40	0.50	22
Etcher/Engraver	80	0.99	21
Grinding Machine Operator, Metal	300	3.73	27
Heat Treater, Annealer	10	0.12	14
Lathe Machine Operator, Metal	20	0.25	40

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Machine Tool Operator, Tool Room	20	0.25	34
Metal Mold Maker	10	0.12	6
Plater Helper	160	1.99	23
Roller	40	0.50	14
Spinner	60	0.75	16
Stone Setter	120	1.49	24
Wax Pattern Workers	30	0.37	49
Painter, Production	20	0.25	21
Punch Press Operator, Metal	190	2.36	17
Punch Press Setter, Metal	30	0.37	24
Assembler - C	110	1.37	45
Decorator, Hand	90	1.12	16
All Other Skilled Workers	220	2.73	N/A
All Other Semiskilled Workers	520	6.46	N/A
All Other Unskilled Workers	870	10.81	N/A
Clerical Occupations	1,640	20.37	N/A
Clerical Supervisor	50	0.62	13
Bookkeeping/Billing Machine Operator	40	0.50	15
Computer Operator	30	0.37	11
Keypunch Operator	60	0.75	7
All Other Office Machine Operators	10	0.12	N/A
Stenographer	20	0.25	9
Accounting Clerk	100	1.24	9
Bookkeeper, Hand	40	0.50	21
File Clerk	40	0.50	9
General Clerk	220	2.73	16
Order Clerk	70	0.87	21
Payroll/Timekeeping Clerk	70	0.87	14
Personnel Clerk	20	0.25	17
Procurement Clerk	30	0.37	14
Secretary	130	1.61	9
Statistical Clerk	20	0.25	20
Switchboard Operator/Receptionist	20	0.25	7
Typist	60	0.75	19
All Other Office Clerical Workers	40	0.50	N/A
Production Clerk	180	2.24	6
Shipping Packer	210	2.61	20
Shipping/Receiving Clerk	40	0.50	13
Stock Clerk, Storeroom	70	0.87	15
All Other Plant Clerical Workers	70	0.87	30
Sales Occupations	330	4.10	N/A
Sales Representatives	320	3.98	10
Sales Clerks	10	0.12	34
TOTAL	8,050	100.00	N/A

N/A Relative Error Not Available

Note: May not add to totals due to rounding.

OCCUPATIONS OF EMPLOYEES
TOYS AND SPORTING GOODS (SIC 394)

Reference Date May 1977

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	510	7.13	15
Professional Occupations	220	3.08	N/A
Industrial Engineer	20	0.28	28
Mechanical Engineer	30	0.42	16
All Other Engineers	20	0.28	6
Systems Analyst E.D.P.	20	0.28	2
Purchasing Agent/Buyer	40	0.56	18
Accountants/Auditors	50	0.70	22
Personnel/Labor Relations Specialist	10	0.14	43
All Other Professional Occupations	10	0.14	N/A
Technical Occupations	60	0.84	N/A
Computer Programmer	20	0.28	18
Engineering Technicians	30	0.42	N/A
Science Technicians	10	0.14	19
Service Occupations	150	2.10	N/A
Janitors, Porters, and Cleaners	40	0.56	29
Guards and Doorkeepers	20	0.28	47
All Other Service Workers	90	1.26	N/A
Maintenance and Production Occupations	4,890	68.39	N/A
Supervisor, Nonworking	140	1.96	20
Mechanics and Repairers	40	0.56	N/A
Truck Driver	20	0.28	40
Electrician	20	0.28	21
Filers, Grinders	20	0.28	18
Industrial Truck Operator	70	0.98	33
Inspector	50	0.70	45
Machinist	20	0.28	20
Millwright	40	0.56	12
Order Filler	60	0.84	21
Press Operator	60	0.84	37
Grinding Machine Operator, Metal	10	0.14	19
Machine Tool Setter, Metal	60	0.84	17
Vulcanizer, Rubber Plate	30	0.42	19
Compression/Injection Molder	260	3.64	37
Assembler - A	30	0.42	19
Assembler - B	60	0.84	19
Assembler - C	1,660	23.22	14
Vacuum Plastic Forming Machine Operator	10	0.14	20
All Other Skilled Workers	80	1.12	N/A
All Other Semiskilled Workers	1,340	18.74	N/A
All Other Unskilled Workers	810	11.33	N/A

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Clerical Occupations	1,060	14.83	N/A
Clerical Supervisor	40	0.56	35
Bookkeeping/Billing Machine Operator	10	0.14	23
Computer Operator	30	0.42	26
Keypunch Operator	40	0.56	27
All Other Office Machine Operators	30	0.42	N/A
Accounting Clerk	60	0.84	29
File Clerk	40	0.56	32
General Clerk	170	2.38	15
Order Clerk	70	0.98	34
Payroll/Timekeeping Clerk	60	0.84	17
Procurement Clerk	20	0.28	40
Switchboard Operator/Receptionist	20	0.28	38
Typist	50	0.70	22
All Other Office Clerical Workers	180	2.52	N/A
Production Clerk	20	0.28	18
Shipping Packer	130	1.82	31
Shipping/Receiving Clerk	60	0.84	40
All Other Plant Clerical Workers	30	0.42	N/A
Sales Occupations	260	3.64	N/A
TOTAL	7,150	100.00	N/A

N/A Relative Error Not Available

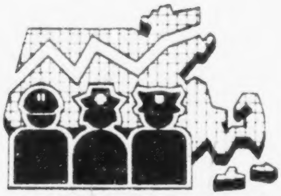
Note: May not add to totals due to rounding.

Occupational Profiles available from the Massachusetts Division of Employment Security.

1971	Manufacturing
1973	Non-Manufacturing
1973	Wholesale and Retail Trade
1974	Manufacturing
1975	Selected Federal - State and Local Government
1976	Wholesale and Retail Trade
1976	Trucking, Warehousing and Air Transportation

Write to:
Occupation/Industry Research Department
Massachusetts Division of Employment Security
Charles F. Hurley Building
Government Center,
Boston, Ma 02114

OCCUPATIONAL PROFILE OF SELECTED NON-MANUFACTURING INDUSTRIES IN MASSACHUSETTS 1978



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Job Market Research   Massachusetts Division of Employment Security

THE COMMONWEALTH OF MASSACHUSETTS
DIVISION OF EMPLOYMENT SECURITY
Charles F. Hurley Building
Government Center, Boston, Ma 02114

AN OCCUPATIONAL PROFILE OF SELECTED NON-MANUFACTURING INDUSTRIES IN MASSACHUSETTS

1978
Report Number 9

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INTRODUCTION

The Occupational Employment Statistics Program is part of a Federal-State cooperative program involving State Employment Security Agencies as well as the Employment and Training Administration and the Bureau of Labor Statistics. It was designed to meet the needs of economists, employment specialists, educators and others for current data on employment by occupation and projected data on employment by occupation and industry. The information obtained from this program will be used as input in constructing industry-occupation matrices that will provide the data base for projecting future manpower requirements, emphasized in the Comprehensive Employment and Training Act of 1973 and other employment and educational legislation.

This publication is the ninth in a planned series of documents on current occupational profiles of Massachusetts industries. Other occupational reports available from this division are listed on the last page.

Currently data is being collected for Wholesale and Retail Trade, Regulated Industries, State and Local Government and for the first time, all levels of Education.

METHODOLOGY

The Sample

The second quarter 1978 report (ES-202) of employment and wages covered by the Massachusetts Employment Security Law was used as a sampling frame for the Occupational Employment Statistics survey of non-manufacturing establishments.

The sampling frame was stratified by three-digit SIC's (Standard Industrial Classification) and by nine employment size classes. Establishments with less than four employees were excluded from the sample, and all units with employment of two hundred and fifty or more were automatically included. All other establishments were subject to sample selection on a random basis, with the units in larger size classes having a proportionately higher chance of selection. Each unit was given a weight according to the proportion of firms selected in each size class. The sample included 5461 establishments with benchmark employment of 265,675.

The Survey and Response

After the initial mailing, two follow-ups were sent to nonrespondents. Telephone calls and personal visits were made to nonrespondents where the data was critical for calculating valid estimates. Of the 5461 establishments in the survey, replies were received from 3773, a response rate of 69.1 percent. After manual editing and mechanical (computer) screening 3585 were useable, with total employment of 173,220, 65.2 percent of sample employment.

The Estimating Procedure

All useable questionnaires were stratified into seven size groups, by industry. Reported total employment and occupational employment on each questionnaire was multiplied by the weight assigned during sample selection. These industry data were then divided into the employment in the ES 202 report (stratified by corresponding cells) for the reference month of the survey. The result produced by this procedure is known as the benchmark factor. This factor was then applied to the occupation data, thus accounting for nonresponse. These occupational estimates were then summed across size classes in industry totals.

Sampling Error

Sampling error is an arithmetic measure of the precision of an estimate. It is the difference between the estimate computed from the sample and the result that would have been obtained if the same methods were used to collect identical information from the universe. The relative errors listed in this report are the sampling errors of each occupation expressed as a percent of that occupational estimate. The relative errors shown are such that the chances are 2 out of 3 that the results of a comparable full scale data collection, using the same survey approach, would not differ by more than the percent shown; the chances are 19 out of 20 that the results of a full scale data collection would not differ by more than twice the percent shown. For example, it is estimated in this report that there are 570 Accountants/Auditors employed in SIC 602, Commercial and Stock Savings Banks making up 1.87 percent of total employment in the industry. Thus the chances are about 68 out of 100 that the results of a comparable full scale data collection would differ by less than 80 (14 percent) from the 570 estimated; similarly the estimated 1.87 percent of total employment would differ by less than 0.26 percent of total employment.

Nonsampling Error

The results of this survey are subject to biases and other nonsampling errors. Although careful editing and screening steps were taken, responding establishments may account for some errors in computations and processing, as well as placing workers in a wrong occupation. The nonrespondents are a source of nonsampling error for which measures are not available but are reflected in the estimating procedure.

GLOSSARY

Non-economic code changes are SIC code changes which are not attributed to actual shifts in the economic activity of a particular establishment. They are frequently the result of corrections of industry codes that were previously assigned incorrectly. The corrective efforts toward improving the coding process in Massachusetts has produced a significant number of non-economic code changes in recent years. This has resulted in substantial improvement in the quality of the data but some distortion in past trends. The problem caused by trend comparability in future surveys, however, should be minimal.

1972 SIC subsequent to the last nonmanufacturing survey, a Standard Industrial Classification (SIC) code revision took place (1967 SIC to 1972 SIC). While the new SIC codes (1972) are a more realistic portrayal of the current industrial structure, they do present comparability problems within certain industries.

Establishments are economic units, generally at a single physical location. An establishment is not necessarily identical with a company. Example: A large bank with officers in 10 cities would represent 10 establishments. Massachusetts has nearly 700 firms that are reporting by establishments.

SCOPE OF SURVEY

This survey covered the following Standard Industrial Classifications, of the 1972 Manual in Non-manufacturing. For your convenience listed below are the two digit SIC Codes with their short titles.

SIC CODE	SHORT TITLES
10-14	Mining, Oil and Gas Extraction
15	General Building Contractors
16	Nonbuilding Contractors
17	Special Trades Contractors
60	Banking
61	Credit Agencies
62	Security, Commodity Brokers
63	Insurance
64	Insurance Agents
65	Real Estate
66	Combined Real Estate and Insurance
67	Investment Companies
70	Hotels and Lodging Places
72	Personal Services
73	Business Services
75	Auto Repair and Services
76	Miscellaneous Repair
78	Motion Pictures
79	Amusement and Recreation
80 ex. 806	Health (except hospitals)
81	Legal Services
83	Social Services
84	Museums
86	Membership Organizations
89	Miscellaneous Services

NONMANUFACTURING
Employment Trends 1975-1978

SIC 1/	Reference Month	1975	1976	1977	1978	
10-14	May	943	882	943	912	
15	June	20,726	18,663	18,841	22,208	
16	June	15,187	14,571	13,835	9,929	2/
17	June	48,015	44,311	42,964	45,864	
60	May	44,096	44,554	45,365	43,809	3/
61	May	5,102	5,048	4,888	8,348	3/
62	June	6,853	6,945	7,012	7,358	
63	May	43,896	43,995	44,842	45,652	
64	May	12,316	12,465	12,738	13,448	
65	May	16,266	15,474	16,612	17,055	
66	May	1,322	1,239	1,241	1,212	
67	June	2,212	2,289	2,276	2,226	
70	May	19,410	19,845	19,453	21,005	
72	May	24,085	23,193	23,831	24,142	
73	June	65,623	68,918	74,508	89,578	
75	May	13,058	14,352	13,458 4/	15,249	
76	June	6,922	6,825	5,925 4/	6,719	
78	April	4,514	4,476	4,305	3,673	5/
79	April	13,542	14,022	14,987	14,086	
80 ex.806	May	67,974	70,506	73,890	77,579	
81	June	10,527	10,962	11,307	11,990	
83	May	17,394	19,040	23,908	28,370	
84	April	1,995	2,214	2,253	2,602	
86	April	19,276	19,240	17,015	17,773	
89	June	30,490	31,424	30,800 4/	37,228	2/
TOTAL		511,744	515,453	527,197	568,015	

1/ 1972 SIC CODES

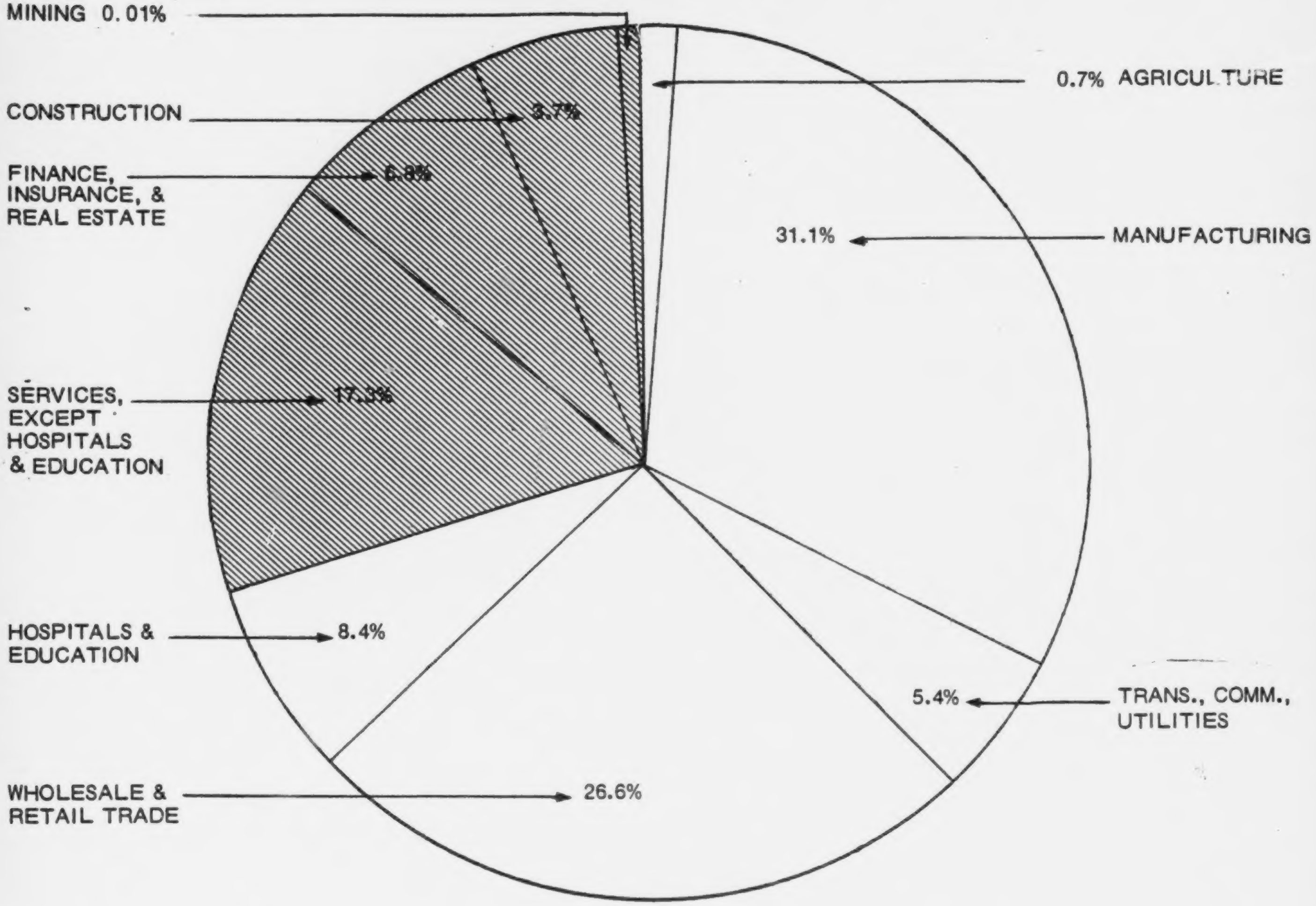
2/ The sharp changes in employment are attributed primarily to a code change in one establishment with employment of 4500. The shift was from SIC 16 to 89.

3/ A complete review of savings and loan associations resulted in a shift from SIC 60 to 61.

4/ Without non-economic code changes employment would have shown growth.

5/ Non-economic code change.

DISTRIBUTION OF COVERED EMPLOYMENT[1] - JUNE 1978



INDUSTRY	JUNE 1978 EMPLOYMENT	PERCENT OF TOTAL
Agriculture	13,816	0.7
Mining	936	0.01
Construction	78,001	3.7
Manufacturing	649,118	31.1
Trans., Comm., Util.	113,452	5.4
Wholesale/Retail Trade	555,434	26.6
Fin., Ins., Real Estate	141,317	6.8
Total Services	537,250	25.7
Hospitals & Education	176,529	8.4
Services, Except Hosp. & Ed.	360,721	17.3
Total All Industries	2,089,324	100.0

▨ Survey Coverage

---

[1] Excludes government

THE MAJOR OCCUPATIONAL CATEGORIES USED IN THE OCCUPATIONAL EMPLOYMENT STATISTICS SURVEY

OES CODE	DESCRIPTION
10000	MANAGERS AND OFFICERS Includes persons concerned with policy making, planning, organizing, staffing, directing and/or who directly supervise the activities of the company or establishment workforce. Includes only managers and officers who are exempt from the minimum wage and overtime provisions of the Fair Labor Standards Act.
20000	PROFESSIONAL OCCUPATIONS Includes persons concerned with the theoretical or practical aspects of such fields as science, engineering, technical work, art, education, medicine, law and business relations. Most of these occupations require substantial educational preparation, usually at the university level.
30000	TECHNICAL OCCUPATIONS Includes all persons actually engaged in technical work utilizing theoretical knowledge of fundamental scientific, engineering, mathematical, computer programming, or draft design principles, comparable to those acquired through study at institutions with less extensive training than 4-year colleges.
40000	SERVICE WORKERS Includes those workers in occupations concerned with the performance of services for persons that require either direct contact or close association with the individual; occupations concerned with the protection of individuals or public or private property; occupations concerned with preparing and serving food and beverages; and occupations related to the cleaning of the interior and equipment of buildings, offices, stores, and similar places.
50000	PRODUCTION AND MAINTENANCE WORKERS Includes all skilled, semiskilled, and unskilled workers performing machine and manual tasks involving operating, maintenance, construction, repair, material handling, and powerplant operations.

The Major Occupational Categories (continued)

OES CODE	DESCRIPTION
60000	CLERICAL OCCUPATIONS Includes office and plant clerical personnel. Office clerical work involves preparing, transcribing, transferring, systematizing, and preserving communications and records; collating accounts and distributing information. Plant clerical work involves planning, coordinating, or expediting of production and the flow of work; or the clerical aspects of receiving, storing, issuing, or shipping of materials, merchandise, supplies, or equipment.
70000	SALES OCCUPATIONS Includes persons concerned wholly or primarily with selling when knowledge of the goods or services sold is required, such as sales agents, sales clerks, real estate agents, demonstrators, etc.

MINING AND QUARRYING (SIC 10 - 14)

This division includes the extraction of minerals occurring naturally: solids, such as coal and ores; liquids, such as crude petroleum; and gases, such as natural gas. The term "mining" is also used in the broad sense to include quarrying, well operation, and milling (crushing, screening, washing, flotation, etc.). Exploration and development of mineral properties are included, as are services performed on a contract, fee or other basis in the development of mineral properties. Dealers in mineral leases are included in Industry 6211.

Although employment in this division is minimal, its contribution to the economy of the state is far reaching. The ability to provide sand, gravel, and stone to the widely diversified construction industry as well as to the manufacturers of stone, clay, glass and concrete products is vital. The construction, expansion and improvement of plant facilities, as well as highway and roads, depends on the ability of these industries to deliver from the most proximate locations.
Employment in these industries has been constant. Of the 83 establishments no single one employs over 100, and 60 establishments employ less than 10. The occupational distribution is virtually unchanged since our last survey in 1975.

RANKED OCCUPATIONAL EMPLOYMENT

1.	Truck Driver	220
2.	Managers and Officers	130
3.	Heavy Equipment Operators	100
4.	Automobile Mechanic	30
5.	General Clerk	30

These occupations represent 58% of industry employment

OCCUPATIONS OF EMPLOYEES
MINING, OIL AND GAS EXTRACTION (SIC 10 - 14)

Reference Date May 1978

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	130	14.77	7
Professional Occupations	10	1.44	N/A
Service Occupations	10	1.44	N/A
Maintenance and Production Occupations	630	71.59	N/A
Supervisor, Nonworking	30	3.41	6
Mechanic, Automotive	30	3.41	3
Mechanic, Maintenance	20	2.27	12
Truck Drivers	220	25.00	2
Delivery and Route Workers	20	2.27	8
Heavy Equipment and Operator	100	11.36	3
Loading-Machine Operator	30	3.41	6
Maintenance Repairer	20	2.27	5
Rock Splitter, Quarry	30	3.41	10
Conveyor Operator/Tender	20	2.27	5
Mill/Grinder Operator	10	1.14	6
All Other Skilled Workers	20	2.27	N/A
All Other Semiskilled Workers	50	5.68	N/A
All Other Unskilled Workers	30	3.41	N/A
Clerical Occupations	100	11.36	N/A
Bookkeeper, Hand	20	2.27	5
General Clerk	30	3.41	6
Secretary	10	1.14	8
Weigher, Record Keeping	20	2.27	4
All Other Clerical Workers	20	2.27	N/A
TOTAL	880	100.00	N/A

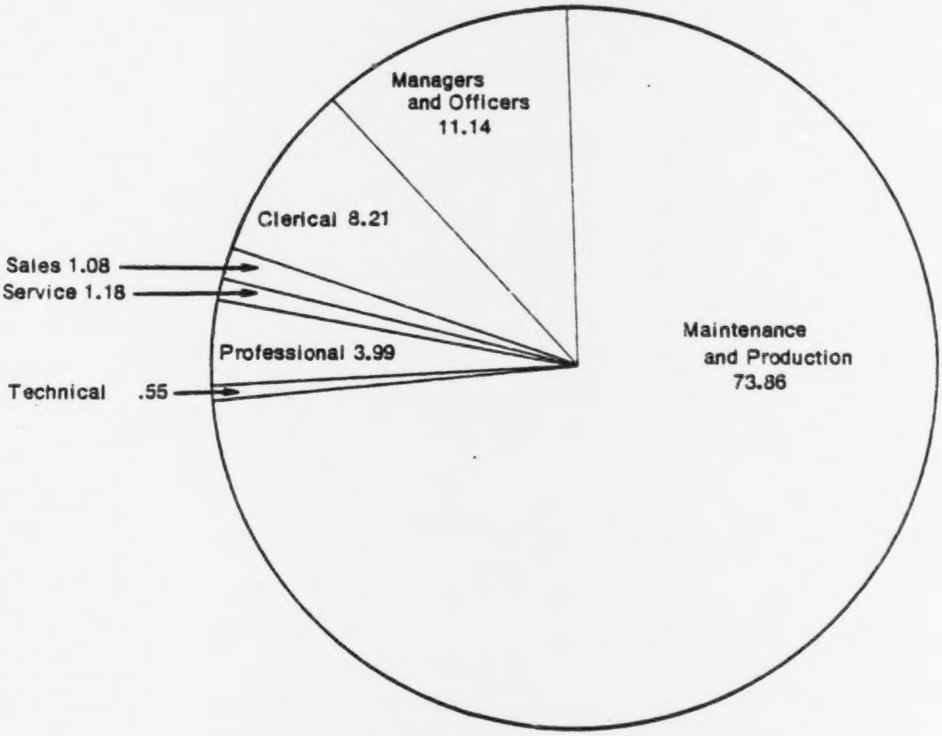
N/A Relative Error Not Available

Note: May not add to totals due to rounding.

CONSTRUCTION (SIC 15 - 17)

This division includes general and special trade contractors primarily engaged in construction and, beginning with the 1972 SIC Manual, operative builders. The term "construction" includes new work, additions, demolition, and alterations, and repairs and in the case of general and special trade contractors the installation of prefabricated building equipment and materials.

DISTRIBUTION OF EMPLOYMENT BY MAJOR OCCUPATIONAL CATEGORY



Ranked Occupational Employment

1.	Carpenter	10,050	6.	Painter	3,240
2.	Managers & Officers	8,690	7.	Heavy Equipment Operator	2,940
3.	All Other Unskilled Workers	6,160	8.	Carpenter Helper	2,710
4.	Electrician	4,010	9.	Truck Driver	2,550
5.	Plumber/Pipefitter	3,580	10.	General Clerk	2,340

These 10 occupations make up 59% of total industry employment

The construction industry has nearly 13,650 establishments in Massachusetts, of which 95% have less than 20 employees and 70% have no more than 3 employees. As volatile as this industry may be to economic conditions such as inflation and interest rates, as well as to weather elements, employment on a year to year basis has, in most cases, fluctuated by only about 5 percent.

Response to our survey seems to indicate that small establishments are adaptable to seasonal and cyclical demands. Plumbing contractors for example in most cases can meet the demands for air-conditioning installation, and single family housing contractors are capable of meeting the demand as sub-contractors for interior work on nonresidential buildings.

A comparison with the survey conducted in 1975 shows a consistency in the major occupational categories but some major changes exist in the trade occupations. The percentage distribution varies by as much as twenty percent. While there is no concrete reason for these variations, one probable cause is that in an industry where many workers have dual occupational responsibilities, the job holder has been reported in a different occupation in each survey.

OCCUPATIONS OF EMPLOYEES
CONSTRUCTION (SIC 15 - 17)

Reference Date June 1978

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	8,690	11.14	2
Professional Occupations	3,110	3.99	N/A
Civil Engineer	450	0.58	7
Electrical/Electronic Engineer	100	0.13	29
Mechanical Engineer	70	0.09	21
Safety Engineer	20	0.03	21
All Other Engineers	60	0.08	N/A
Purchasing/Agent Buyer	170	0.22	7
Accountants/Auditors	590	0.76	5
Cost Estimator	1,610	2.06	3
Personnel/Labor Relations Specialist	20	0.03	24
All Other Professional Workers	20	0.03	N/A
Technical Occupations	430	0.55	N/A
Computer Programmer	20	0.03	21
Drafter	120	0.15	12
Electrical/Electronic Technicians	170	0.22	14
Surveyor	60	0.08	18
All Other Technicians	60	0.08	N/A
Service Occupations	920	1.18	N/A
Supervisor, Nonworking Service	20	0.03	31
Janitors, Porters, & Cleaners	860	1.10	16
Guards & Doorkeepers	40	0.05	33
Maintenance & Production Occupations	57,640	73.86	N/A
Supervisor, Nonworking	670	0.86	6
Mechanic, Automotive	210	0.27	8
Diesel Mechanic	100	0.13	11
Engineering Equipment Mechanic	190	0.24	13
Mechanic, Maintenance	240	0.31	14
Refrigeration/Air Conditioning Mechanic	980	1.26	9
All Other Mechanics & Repairers	290	0.37	27
Truck Drivers	2,550	3.27	4
Air-Hammer Operator	210	0.27	19
Asbestos/Insulation Workers	530	0.68	20
Blaster, Construction	10	0.01	26
Bricklayer	1,440	1.85	9
Cabinetmaker	80	0.10	11
Carpet Cutter/Layer	150	0.19	12
Carpenter	10,050	12.88	3
Cement Mason	1,030	1.32	8
Concrete-Mixer Operator	20	0.03	23
Conduit Mechanic	10	0.01	29
Crane, Derrick, Hoist Operator	250	0.32	21
Drywall Applicator	1,150	1.47	13
Electrician	4,010	5.14	4
Fence Erector	660	0.85	14

SIC 15 - 17 (cont.)

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Fitter, Pipelayer	30	0.04	18
Floor Sanding Machine Operator	30	0.04	17
Furnace Installer/Repairer	100	0.13	12
Glazier	250	0.32	20
Heavy Equipment Operator	2,940	3.77	6
Rigger	170	0.22	26
Industrial Truck Operator	140	0.18	21
Lather	40	0.05	23
Line Installer-Repairer	70	0.09	27
Maintenance Repairer	40	0.05	16
Metal Fabricator	80	0.10	23
Millwright	70	0.09	13
Oil-Burner Installer	160	0.21	13
Oiler	100	0.13	14
Painter, Maintenance	3,240	4.15	2
Paperhanger	70	0.09	13
Pipelayer	620	0.79	11
Plasterer	390	0.50	14
Plumber/Pipefitter	3,580	4.59	5
Reinforcing-Iron Worker	170	0.22	29
Roofer	1,700	2.18	5
Sheet Metal Worker	1,840	2.36	11
Layout Worker	110	0.14	33
Structural-Steel Worker	340	0.44	17
Taper	400	0.51	12
Tile Setter	160	0.21	16
Welders/Flame Cutters	250	0.32	14
Surveyor Helper	30	0.04	21
Asphalt-Plant Drier	10	0.01	29
Asphalt-Plant Operator	30	0.04	22
Asphalt Raker	60	0.08	16
Ceiling-Tile Installer	130	0.17	13
Terrazzo Worker	10	0.01	28
Bricklayer Helper	760	0.97	8
Carpenter Helper	2,710	3.47	5
Cement Mason Helper	410	0.53	11
Electrician Helper	940	1.20	6
Painter Helper	80	0.10	16
Paperhanger Helper	10	0.01	28
Plasterer Helper	110	0.14	13
Plumber/Pipefitter Helper	530	0.68	10
Roofer Helper	380	0.49	13
Tile Setter Helper	60	0.08	26
Cabinetmaker Helper	20	0.03	14
All Other Skilled Workers	1,520	1.95	N/A
All Other Semiskilled Workers	1,760	2.26	N/A
All Other Unskilled Workers	6,160	7.89	N/A

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Clerical Occupations	6,410	8.21	N/A
Clerical Supervisor	20	0.03	20
Bookkeeping/Billing Machine Operator	50	0.06	28
Computer Operator	30	0.04	12
Keypunch Operator	20	0.03	33
Stenographer	20	0.03	21
Accounting Clerk	50	0.06	16
Bookkeeper, Hand	1,380	1.77	3
File Clerk	20	0.03	22
General Clerk	2,340	3.00	3
Payroll/Timekeeping Clerk	460	0.59	5
Personnel Clerk	10	0.01	20
Receptionist	10	0.01	22
Secretary	1,740	2.23	4
Switchboard Operator	10	0.01	28
Switchboard Operator/Receptionist	20	0.03	30
Typist	80	0.10	10
All Other Office Clerical Workers	50	0.06	N/A
Shipping/Receiving Clerk	20	0.03	18
Stock Clerk, Storeroom	50	0.06	16
All Other Plant Clerical Workers	30	0.04	N/A
Sales Occupations	840	1.08	N/A
Sales Representatives	820	1.05	6
Sales Clerks	20	0.03	34
TOTAL	78,040	100.00	N/A

N/A Relative Error Not Available

Note: May not add to totals due to rounding.

OCCUPATIONS OF EMPLOYEES
HEAVY CONSTRUCTION, EXCEPT HIGHWAYS (SIC 162)

Reference Date June 1978

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	710	13.50	14
Professional Occupations	210	3.99	N/A
Technical Occupations	30	0.57	N/A
Maintenance and Production Occupations	3,950	75.10	N/A
Truck Driver	420	7.98	25
Carpenter	270	5.13	31
Cement Mason	30	0.57	15
Heavy Equipment Operator	700	13.31	32
Carpenter Helper	40	0.76	25
All Other Skilled Workers	1,520	28.90	N/A
All Other Semiskilled Workers	130	2.47	N/A
All Other Unskilled Workers	840	15.97	N/A
Clerical Occupations	360	6.84	N/A
Computer Operator	10	0.19	34
All Other Office Clerical Workers	330	6.27	N/A
All Other Plant Clerical Workers	20	0.38	N/A
TOTAL	5,260	100.00	N/A

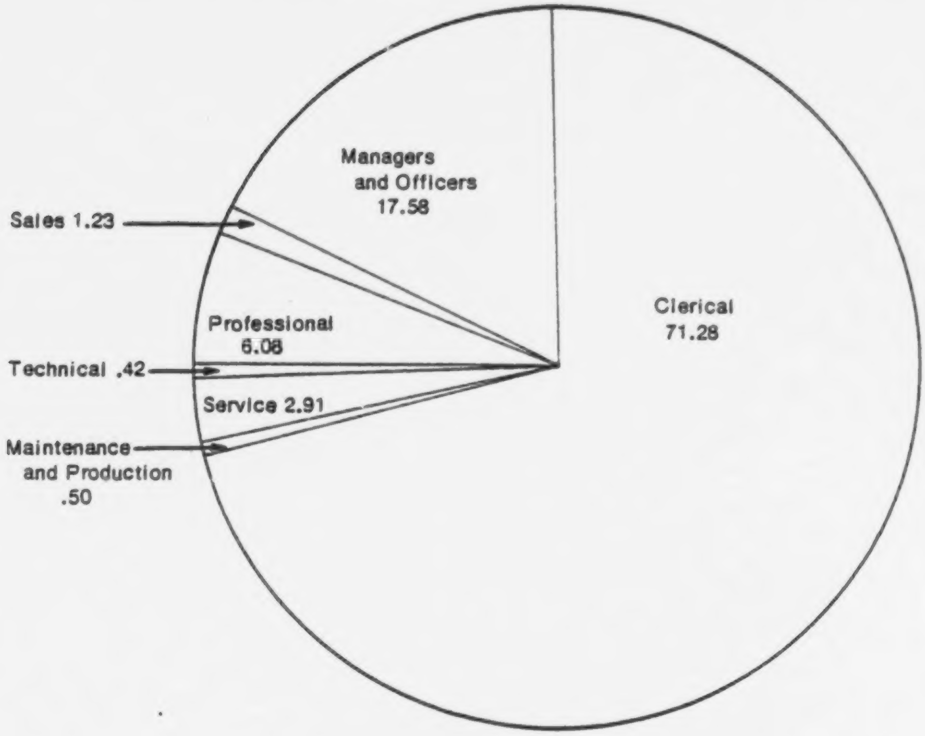
N/A Relative Error Not Available

Note: May not add to totals due to rounding.

BANKING AND CREDIT AGENCIES (SIC 60 AND 61)

These major groups include institutions which are engaged in Deposit Banking or closely related functions, including Fiduciary Activities, and establishments engaged in extending credit in the form of loans.

DISTRIBUTION OF EMPLOYMENT BY MAJOR OCCUPATIONAL CATEGORY



Ranked Occupational Employment

1.	Teller	12,760	6.	Secretary	1,880
2.	Managers & Officers	9,170	7.	Typist	1,130
3.	General Clerk	3,510	8.	New Accounts Teller	1,100
4.	All Other Office Clerical Workers	2,630	9.	Accounting Clerk	1,080
5.	Clerical Supervisor	2,310	10.	File Clerk	1,020

These 10 occupations make up 70% of total employment

These major groups have a total of almost 1600 establishments of which 85 employ 100 or more. These 85 units account for nearly 60% of total employment. If the many branch locations of these establishments were included their share of employment would be substantially greater.

Contrary to general belief, negligible employment growth was attained in banking and its allied industries between 1975 and 1977. Significant employment gains, however, were recorded during 1978. The explanation for the almost static employment from 1975 thru 1977 most probably lies with the many mergers and associations that were consumated during this period. These corporate changes brought about many centralized computer centers and a large savings in personnel, in the occupations that would normally be increasing.

After analyzing the results of our 1975 survey and comparing the occupational staffing patterns with the 1978 survey, we caution that conclusions drawn from the differences can be misleading. In the interim a complete survey of SIC coding was undertaken within these industries, with particular emphasis placed on the type of insurance membership held by each bank and a clear understanding if they were members of the Federal Reserve System. This survey resulted in an enormous number of code changes within the banking and credit agency industries.

Over seventeen percent of employment is made up of managers and officers and seventy one percent were in clerical positions, with tellers being the single largest occupation. In the latter group more than 40 occupations were listed.

OCCUPATIONS OF EMPLOYEES
BANKING AND CREDIT AGENCIES (SIC 60 AND 61)

Reference Date May 1978

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	9,170	17.58	1
Professional Occupations	3,170	6.08	N/A
Financial Analyst	130	0.25	2
Economist	20	0.04	1
Systems Analyst, EDP	340	0.65	2
Purchasing Agent/Buyer	80	0.15	15
Accountants/Auditors	800	1.53	3
Budget Analyst	40	0.08	3
Credit Analyst, Chief	160	0.31	3
Credit Analyst	340	0.65	5
Lawyer	50	0.10	4
Personnel/Labor Relations Specialist	190	0.36	2
Public-Relations Practitioner	120	0.23	4
Appraiser, Real Estate	160	0.31	5
All Other Professional Workers	740	1.42	N/A
Technical Occupations	220	0.42	N/A
Computer Programmers	190	0.36	3
All Other Technicians	30	0.06	N/A
Service Occupations	1,520	2.91	N/A
Supervisor, Nonworking Service	40	0.08	4
Janitors, Porters, and Cleaners	920	1.76	4
Guards and Doorkeepers	370	0.71	6
Food Service Workers	120	0.23	3
All Other Service Workers	70	0.13	N/A
Maintenance and Production Occupations	260	0.50	N/A
Supervisor, Nonworking	30	0.06	4
Mechanic, Maintenance	20	0.04	1
All Other Mechanics	30	0.06	1
Truck Driver	10	0.02	5
Carpenter	10	0.02	4
Electrician	20	0.04	2
Maintenance Repairer	60	0.12	10
Parking-Lot Attendant	30	0.06	9
All Other Skilled Workers	20	0.04	N/A
All Other Semiskilled Workers	10	0.02	N/A
All Other Unskilled Workers	20	0.04	N/A
Clerical Occupations	37,180	71.28	N/A
Clerical Supervisor	2,310	4.43	3
Addressing Machine Operator	30	0.06	10
Bookkeeping/Billing Machine Operator	270	0.52	8
Computer Operator	270	0.52	3
Keypunch Operator	310	0.59	5
Peripheral E.D.P. Equipment Operator	70	0.13	5

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Proof Machine Operator	950	1.82	5
Coin Machine Operator	140	0.27	8
All Other Office Machine Operators	290	0.56	1
Stenographer	140	0.27	7
Accounting Clerk	1,080	2.07	3
Bookkeeper, Hand	420	0.81	5
Adjustment Clerk	310	0.59	3
Cashier	70	0.13	10
Checking Clerk, Bank	320	0.61	9
Collector	640	1.23	3
Credit Reporter	170	0.33	6
File Clerk	1,020	1.96	5
Insurance Clerk	70	0.13	4
General Clerk	3,510	6.73	3
Mail Clerk	340	0.65	4
Messenger, Bank	90	0.17	6
New-Accounts Teller	1,100	2.11	3
Order Clerk	20	0.04	7
Payroll/Timekeeping Clerk	90	0.17	13
Personnel Clerk	130	0.25	2
Receptionist	430	0.82	10
Safe-Deposit Clerk	310	0.59	7
Secretary	1,880	3.60	2
Statement Clerk	710	1.36	5
Statistical Clerk	20	0.04	5
Switchboard Operator	280	0.54	8
Switchboard Operator/Receptionist	130	0.25	10
Messenger	430	0.82	6
Teller	12,760	24.46	1
Transit Clerk	290	0.56	8
Typist	1,130	2.17	6
Credit Clerk	990	1.90	6
Mortgage Closing Clerk	570	1.09	7
Sorting Clerk, Bank	70	0.13	4
Loan Closer	270	0.52	6
All Other Office Clerical Workers	2,630	5.04	N/A
Stock Clerk, Storeroom	60	0.12	4
All Other Plant Clerical Workers	60	0.12	N/A
Sales Occupations	640	1.23	4
TOTAL	52,160	100.00	N/A

N/A Relative Error Not Available

Note: May not add to totals due to rounding.

OCCUPATIONS OF EMPLOYEES
COMMERCIAL AND STOCK SAVINGS BANKS (SIC 602)

Reference Date May 1978

OCCUPATION	EMPLOYMENT Number	Percent	Relative Error Percent
Managers and Officers	5,230	17.14	6
Professional Occupations	1,880	6.16	N/A
Financial Analyst	110	0.36	9
Economist	10	0.03	10
Systems Analyst, EDP	260	0.85	6
Accountants/Auditors	570	1.87	14
Budget Analyst	30	0.10	13
Credit Analyst, Chief	80	0.26	11
Credit Analyst	150	0.49	24
Lawyer	30	0.10	13
Personnel/Labor Relations Specialist	140	0.46	7
Public Relations Practitioner	60	0.20	16
Appraiser, Real Estate	20	0.07	18
All Other Professional Workers	420	1.38	N/A
Technical Occupations	170	0.56	N/A
Computer Programmer	140	0.46	14
All Other Technicians	30	0.10	N/A
Service Occupations	730	2.39	N/A
Janitors, Porters, Cleaners	310	1.02	30
Guards and Doorkeepers	240	0.79	30
Food Service Workers	110	0.36	13
All Other Service Workers	70	0.23	N/A
Maintenance and Production Occupations	120	0.39	N/A
Truck Driver	10	0.03	20
Maintenance Repairer	20	0.07	28
Parking Lot Attendant	30	0.10	33
All Other Skilled Workers	30	0.10	N/A
All Other Semiskilled Workers	10	0.03	N/A
All Other Unskilled Workers	20	0.07	N/A
Clerical Occupations	21,850	71.62	N/A
Clerical Supervisor	1,380	4.52	15
Addressing Machine Operator	20	0.07	38
Computer Operator	210	0.69	13
Keypunch Operator	270	0.88	17
Peripheral EDP Operator	50	0.16	23
Proof Machine Operator	900	2.95	15
Coin Machine Operator/Sorter Currency	100	0.33	38
All Other Office Machine Operators	290	0.95	N/A
Stenographer	40	0.13	31
Accounting Clerks	650	2.13	13
Adjustment Clerk	270	0.88	10
Checking Clerk, Bank Records	230	0.75	40

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Collector	310	1.02	9
Credit Reporter	130	0.43	23
File Clerk	830	2.72	21
General Clerk	2,570	8.42	12
Mail Clerk	240	0.79	17
Messenger, Bank	70	0.23	21
New Accounts Teller	490	1.61	20
Order Clerk	10	0.03	30
Personnel Clerk	100	0.33	8
Receptionist	300	0.98	45
Safe-Deposit Clerk	230	0.75	28
Secretary	1,290	4.23	10
Statement Clerk	390	1.28	27
Switchboard Operator	150	0.49	48
Messenger	370	1.21	23
Teller	5,710	18.72	7
Transit Clerk	280	0.92	26
Typist	720	2.36	29
Credit Clerk	280	0.92	50
Mortgage Closing Clerk	240	0.79	48
Sorting Clerk, Bank	40	0.13	17
All Other Office Clerical Workers	2,580	8.46	N/A
Stock Clerk, Storeroom	50	0.16	13
All Other Plant Clerical Occupations	60	0.20	N/A
Sales Occupations	530	1.74	12
TOTAL	30,510	100.00	N/A

N/A Relative Error Not Available

Note: May not add to totals due to rounding.

OCCUPATIONS OF EMPLOYEES
MUTUAL SAVINGS BANKS (SIC 603)

Reference Date May 1978

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	2,010	17.52	5
Professional Occupations	410	3.57	N/A
Purchasing Agent	20	0.17	18
Accountants/Auditors	100	0.87	14
Credit Analyst, Chief	20	0.17	41
Personnel/Labor Relations Specialist	30	0.26	13
Public Relations Practitioner	30	0.26	18
Appraiser, Real Estate	100	0.87	18
All Other Professional Workers	110	0.96	N/A
Technical Occupations	10	0.09	N/A
Service Occupations	320	2.79	N/A
Janitors, Porters, and Cleaners	260	2.27	14
Guards and Doorkeepers	50	0.44	45
All Other Service Workers	10	0.09	N/A
Maintenance and Production Workers	40	0.35	N/A
Supervisor, Nonworking.	20	0.17	25
All Other Skilled Workers	10	0.09	N/A
All Other Unskilled Workers	10	0.09	N/A
Clerical Occupations	8,660	75.50	N/A
Supervisor, Clerical	590	5.14	10
Bookkeeping/Billing Machine Operator	70	0.61	23
Computer Operator	40	0.35	26
Keypunch Operator	10	0.09	45
All Other Office Machine Operators	20	0.17	N/A
Stenographer	70	0.61	37
Accounting Clerk	180	1.57	20
Bookkeeper, Hand	150	1.31	19
Checking Clerk, Bank Records	60	0.52	19
Collector	80	0.70	21
Credit Reporter	40	0.35	26
File Clerk	140	1.22	15
Insurance Clerk	50	0.44	14
General Clerk	400	3.49	19
Mail Clerk	40	0.35	20
Messenger, Bank	10	0.09	42
New-Accounts Teller	470	4.10	13
Payroll/Timekeeping Clerk	20	0.17	25
Personnel Clerk	30	0.26	19
Receptionist	30	0.26	29
Safe-Deposit Clerk	70	0.61	15
Secretary	290	2.53	13
Statement Clerk	200	1.74	13

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Switchboard Operator	90	0.78	15
Switchboard Operator/Receptionist	40	0.35	33
Messenger	40	0.35	21
Teller	4,560	39.76	3
Transit Clerk	10	0.09	39
Typist	280	2.44	17
Credit Clerk	150	1.31	14
Mortgage Closing Clerk	190	1.66	15
Sorting Clerk, Bank	20	0.17	38
Loan Closer	130	1.13	13
All Other Office Clerical Workers	90	0.78	N/A
Sales Occupations	20	0.17	26
TOTAL	11,470	100.00	N/A

N/A Relative Error Not Available

Note: May not add to totals due to rounding.

SAVINGS AND LOAN ASSOCIATIONS (SIC 612)

Reference Date May 1978

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relat Err Perc
Managers and Officers	930	22.30	
Professional Occupations	110	2.64	N/
Accountants/Auditors	30	0.72	4
All Other Professional Workers	80	1.92	N/
Service Occupations	170	4.08	N/
Janitors, Porters, and Cleaners	150	3.60	2
All Other Service Workers	20	0.48	N/
Maintenance and Production Occupations	20	0.48	N/
Clerical Occupations	2,940	70.50	N/
Clerical Supervisor	170	4.08	1
Bookkeeping/Billing Machine Operator	70	1.68	3
Accounting Clerk	50	1.20	3
General Clerk	160	3.84	2
New-Accounts Teller	110	2.64	2
Receptionist	60	1.44	3
Secretary	130	3.12	2
Statement Clerk	80	1.92	1
Switchboard Operator/Receptionist	30	0.72	3
Teller	1,690	40.53	
Typist	30	0.72	4
Credit Clerk	70	1.68	3
Mortgage Closing Clerk	100	2.40	2
All Other Office Clerical Workers	190	4.56	N/
TOTAL	4,170	100.00	N/

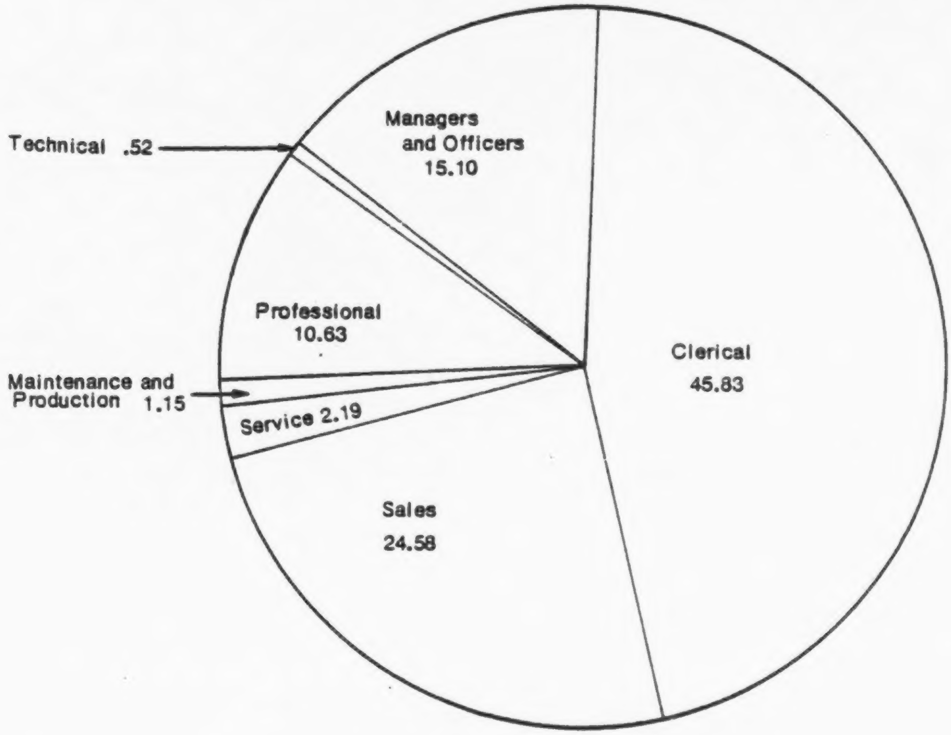
N/A Relative Error Not Available

Note: May not add to totals due to rounding.

SECURITY BROKERS AND OTHER INVESTMENT COMPANIES (SIC 62 AND 67)

These major groups include establishments engaged in the underwriting purchase, sale, or brokerage of securities and other financial contracts on their own account or for the account of others; exchanges, exchange clearing houses and other services allied with the exchange of securities and commodities, as well as investment trusts, investment companies, holding companies, and commodity trading companies.

DISTRIBUTION OF EMPLOYMENT BY MAJOR OCCUPATIONAL CATEGORY



Ranked Occupational Employment

1.	Sales Agent, Financial Service	1,930	6.	Financial Analyst	300
2.	Managers & Officers	1,450	7.	Accountants/Auditors	250
3.	Secretary	1,190	8.	Accounting Clerk	230
4.	General Clerk	890	9.	All Other Sales Agents	220
5.	Brokerage Clerk	350	10.	Typist	190

These 10 occupations make up 73% of total industry employment

These major groups combined include more than 650 establishments of which 400 employ three or less. There are 21 establishments that account for almost one third of total employment. Employment has remained constant in both SIC 62 and 67.

Management, Clerical and Sales occupations account for almost ninety percent of employment, with Sales occupations alone representing nearly twenty-five percent. Since our 1975 survey, Sales occupations have grown by 700, nearly a fifty-percent increase, Managers and Officers have increased by more than thirty percent, and Automatic Data Processing occupations have a sixty percent growth. These sharp increases are particularly significant when the industry growth has not been large. The distribution of other occupations has changed but not dramatically.

OCCUPATIONS OF EMPLOYEES
SECURITY BROKERS AND OTHER INVESTMENT COMPANIES (SIC 62 AND 67)

Reference Date June 1978

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	1,450	15.10	3
Professional Occupations	1,020	10.63	N/A
Financial Analyst	300	3.13	6
Statistician	30	0.31	11
Economist	10	0.10	16
Market-Research Analyst	20	0.21	26
Systems Analyst, E.D.P.	30	0.31	10
Purchasing Agent/Buyer	10	0.10	11
Accountants/Auditors	250	2.60	8
Lawyer	40	0.42	9
Personnel/Labor Relations Specialist	20	0.21	9
Floor Representative/Trader	130	1.35	9
All Other Professional Workers	180	1.88	N/A
Technical Occupations	50	0.52	N/A
Service Occupations	210	2.19	N/A
Janitors, Porters, and Cleaners	110	1.15	20
Guards and Doorkeepers	20	0.21	28
Food Service Workers	50	0.52	1
All Other Service Workers	30	0.31	32
Maintenance and Production Occupations	110	1.15	N/A
Maintenance Repairer	60	0.63	21
All Other Semiskilled Workers	50	0.52	N/A
Clerical Occupations	4,400	45.83	N/A
Clerical Supervisor	190	1.98	5
Bookkeeping/Billing Machine Operator	20	0.21	17
Computer Operator	50	0.52	12
Keypunch Operator	120	1.25	8
Duplicating Machine Operator	20	0.21	10
All Other Office Machine Operators	60	0.63	5
Stenographer	100	1.04	15
Accounting Clerk	230	2.40	8
Dividend Clerk	40	0.42	12
Bookkeeper, Hand	190	1.98	5
Brokerage Clerk	350	3.65	6
Cashier	40	0.42	7
File Clerk	80	0.83	10
General Clerk	890	9.27	7
Securities Cashier	30	0.31	10
Trade Recorder	20	0.21	8
Mail Clerk	70	0.73	7
Margin Clerk	40	0.42	7

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Payroll/Timekeeping Clerk	30	0.31	12
Personnel Clerk	10	0.10	8
Purchase and Sales Clerk	20	0.21	11
Receptionist	50	0.52	12
Secretary	1,190	12.40	3
Security Description Clerk	10	0.10	13
Switchboard Operator	50	0.52	11
Switchboard Operator/Receptionist	70	0.73	7
Messenger	50	0.52	7
Transfer Clerk	40	0.42	11
Typist	190	1.98	6
All Other Office Clerical Workers	130	1.35	N/A
Stock Clerk, Storeroom	20	0.21	23
Sales Occupations	2,360	24.58	N/A
Sales Agent, Financial Service	30	0.31	15
Sales Agent, Securities	1,930	20.10	2
Broker and Market Operator, Commodities	20	0.21	19
Portfolio Manager	160	1.67	11
All Other Sales Agents	220	2.29	N/A
TOTAL	9,600	100.00	N/A

N/A Relative Error Not Available

Note: May not add to totals due to rounding.

OCCUPATIONS OF EMPLOYEES
SECURITY BROKERS AND DEALERS (SIC 621)

Reference Date June 1978

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	470	10.54	10
Professional Occupations	250	5.61	N/A
Financial Analyst	70	1.57	33
Accountants/Auditors	40	0.90	32
Floor Representative/Securities Trader	60	1.35	47
All Other Professional Workers	80	1.79	N/A
Technical Occupations	10	0.22	N/A
Service Occupations	20	0.45	N/A
Maintenance and Production Occupations	20	0.45	N/A
Clerical Occupations	1,620	36.32	N/A
Clerical Supervisor	60	1.35	21
Keypunch Operator	40	0.90	32
Duplicating Machine Operator	10	0.22	37
All Other Office Machine Operators	60	1.35	N/A
Stenographer	20	0.45	47
Accounting Clerk	30	0.67	40
Dividend Clerk	20	0.45	46
Brokerage Clerk	240	5.38	20
Cashier	20	0.45	39
File Clerk	20	0.45	50
General Clerk	180	4.04	22
Securities Cashier	30	0.67	33
Mail Clerk	20	0.45	31
Margin Clerk	40	0.90	21
Purchase/Sales Clerk	20	0.45	43
Receptionist	10	0.22	24
Secretary	480	10.76	10
Switchboard Operator	20	0.45	18
Switchboard Operator/Receptionist	40	0.90	31
Messenger	40	0.90	29
Typist	60	1.35	37
All Other Office Clerical Workers	160	3.59	N/A
Sales Occupations	2,070	46.41	N/A
Sales Representative, Securities	1,910	42.83	7
All Other Sales Representatives	160	3.59	N/A
TOTAL	4,460	100.00	N/A

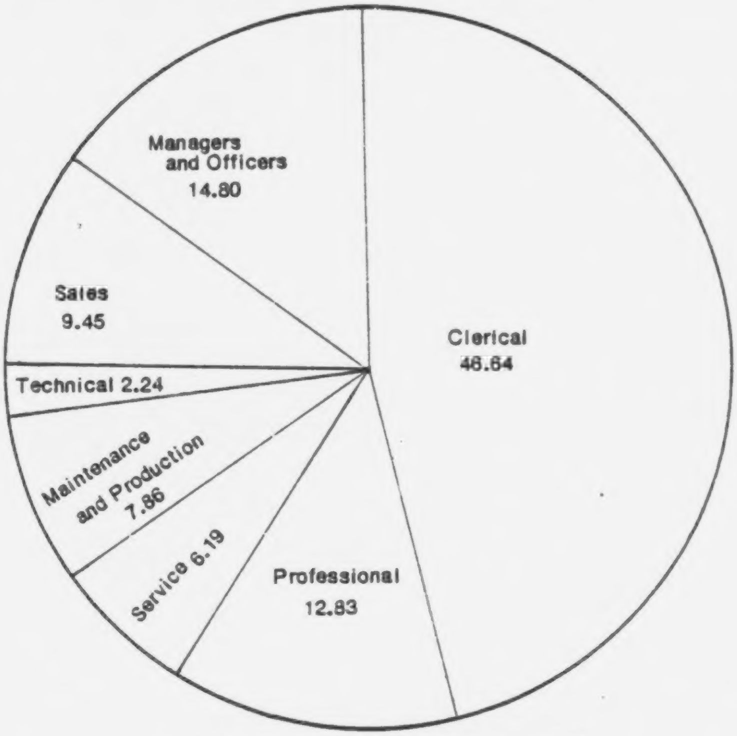
N/A Relative Error Not Available

Note: May not add to totals due to rounding.

INSURANCE, REAL ESTATE AND COMBINATIONS OF REAL ESTATE, INSURANCE, LOANS AND LAW OFFICES (SIC 63, 64, 65, 66)

These major groups include insurance carriers of all types, agents and brokers of insurance, organizations offering services to insurance companies and to policyholders. Real estate operators, owners and lessors of real property, as well as buyers, sellers, developers, agents, and brokers. Also included in this group are Combinations of Real Estate, Insurance, Loans, Law Offices.

DISTRIBUTION OF EMPLOYMENT BY MAJOR OCCUPATIONAL CATEGORY



Ranked Occupational Employment

1.	Managers & Officers	11,450	6.	Underwriter	2,630
2.	General Clerk	6,830	7.	Maintenance Repairer	2,610
3.	Sales Agent, Insurance	5,640	8.	Typist	2,240
4.	All Other Office Clerical Workers	4,560	9.	All Other Janitors and Cleaners	2,150
5.	Secretary	3,900	10.	Clerical Supervisor	2,090

These 10 occupations make up 51% of total industry employment

Traditionally, the industries included in these major groups have been considered to be the least subject to employment fluctuation because of changes in economic conditions. As might be expected there has been a small but steady growth in employment from year to year.

Massachusetts has many life insurance companies home based in the State, as well as several Fire and Casualty groups and many long established New England Mutuals. These establishments along with almost 6000 Insurance Agents and Brokers, Real Estate Agents, and combination Real Estate, Insurance, Loans and Law Offices account for employment approaching 80,000.

Establishments and Employment Distribution
June 1978

SIC		Establishments	Employment
631	Life Insurance	251	25,156
632	Accident & Health	29	4,962
633	Fire, Marine, Casualty	152	15,145
635	Surety	10	57
636	Title	12	131
637	Pension, Health & Welfare	98	398
641	Agents, Brokers & Services	1,904	13,738
651	Real Estate Operators	1,556	7,401
653	Real Estate Agents & Managers	1,893	8,969
654	Title Abstract Officers	13	66
655	Subdividers	215	1,293
661	Combination, Real Estate, Insurance, Loans, Law Officers	287	1,219

Of the nearly 6500 establishments in these groups 32 employ 33,000 or forty-three percent of total employment, and over 4400 establishments employ a total of 5700 or only seven percent of total employment.

The insurance industries employ nearly 60,000 and of this total seventy percent are employed by insurance carriers with the remainder primarily being Agents and Brokers, but with some employed in supportive services such as independent adjusting and inspection bureaus.

Most Real Estate employment is divided between Real Estate Operators and Real Estate Agents and Managers. Operators account for forty percent of employment and Agents and Managers forty-seven percent.

In comparing occupational staffing patterns the most significant change is a thirty percent increase in Underwriters since the 1975 survey. Other changes include a five percent increase in Programmers, six percent more Managers and Officers and a reduction of seven percent in Sales occupations.

Other changes in employment occurred but they were insignificant as a share of total employment.

OCCUPATIONS OF EMPLOYEES
INSURANCE, INSURANCE AGENTS, AND REAL ESTATE (SIC 63, 64, 65, 66)

Reference Date May 1978

OCCUPATION	EMPLOYMENT Number	Percent	Relative Error Percent
Managers and Officers	11,450	14.80	5
Professional Occupations	9,930	12.83	N/A
Engineers	160	0.21	27
Actuary	330	0.43	18
Financial Analyst	160	0.21	26
Statistician	390	0.50	31
Systems Analyst, E.D.P.	1,020	1.32	20
Purchasing Agent/Buyer	120	0.16	33
Accountants/Auditors	930	1.20	10
Appraiser	120	0.16	32
Budget Analyst	120	0.16	18
Investigator, Insurance	130	0.17	30
Lawyer	350	0.45	11
Librarian, Professional	20	0.03	25
Personnel/Labor Relations Specialist	170	0.22	14
Physician/Surgeon	60	0.08	13
Public Relations Practitioner	90	0.12	21
Safety Inspector	380	0.49	16
Title Examiner	80	0.10	7
Appraiser, Real Estate	170	0.22	28
Special Agent, Insurance	150	0.19	18
Claims Examiner, Insurance	920	1.19	18
Underwriter	2,630	3.40	8
All Other Professional Workers	1,430	1.85	N/A
Technical Occupations	1,730	2.24	N/A
Computer Programmers	1,090	1.41	21
All Other Technicians	640	0.83	N/A
Service Occupations	4,790	6.19	N/A
Supervisor, Nonworking Service	160	0.21	12
Maid	520	0.67	25
All Other Janitors, and Cleaners	2,150	2.78	11
Guards and Doorkeepers	730	0.98	12
Food Service Workers	700	0.90	21
Elevator Operator	130	0.19	31
All Other Service Workers	400	0.52	N/A
Maintenance and Production Occupations	6,080	7.86	N/A
Supervisor, Nonworking	170	0.22	14
Mechanics and Repairers	50	0.06	N/A
Truck Driver	20	0.03	26
Carpenter	370	0.48	11
Compositor/Typesetter	70	0.09	29
Electrician	120	0.16	28

SIC 63, 64, 65, 66 (cont.)

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Maintenance Repairer	2,610	3.37	8
Helper, Trades	190	0.25	16
Painter, Maintenance	420	0.54	12
Plumber/Pipefitter	90	0.12	26
Press Operator, Plate Printer	110	0.14	16
Stationary/Boiler Firer	50	0.06	29
Stationary Engineer	210	0.27	18
Gardeners and Groundskeepers	1,190	1.54	5
All Other Skilled Workers	180	0.23	N/A
All Other Semiskilled Workers	170	0.22	N/A
All Other Unskilled Workers	60	0.08	N/A
Clerical Occupations	36,090	46.64	N/A
Clerical Supervisor	2,090	2.70	11
Bookkeeping/Billing Machine Operators	400	0.52	19
Computer Operator	430	0.56	17
Keypunch Operator	490	0.63	14
Duplicating Machine Operators	140	0.18	24
All Other Office Machine Operators	330	0.43	42
Stenographer	330	0.43	12
Accounting Clerk	1,630	2.11	9
Bookkeeper, Hand	1,230	1.59	6
Cashier	200	0.26	29
Claims Adjuster	1,010	1.31	16
Claims Clerk	970	1.25	10
Correspondence Clerk	490	0.63	17
File Clerk	1,750	2.26	15
General Clerk	6,830	8.83	11
Mail Clerk	440	0.57	12
Order Clerk	90	0.12	26
Payroll/Timekeeping Clerk	190	0.25	15
Personnel Clerk	130	0.17	19
Policy-Change Clerk	1,260	1.63	8
Rater	1,260	1.63	12
Real Estate Clerk	270	0.35	10
Receptionist	350	0.45	9
Secretary	3,900	5.04	6
Statistical Clerk	270	0.35	27
Switchboard Operator	150	0.19	13
Switchboard Operator/Receptionist	380	0.49	11
Typist	2,240	2.89	11
Worksheet Clerk	430	0.56	34
Insurance Checker	260	0.34	32
Claim Examiner	1,100	1.42	13
Loan Closer	20	0.03	33
All Other Office Clerical Workers	4,560	5.89	N/A
Shipping/Receiving Clerk	60	0.08	18

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Stock Clerk, Storeroom	100	0.13	27
All Other Plant Clerical Workers	310	0.40	N/A
Sales Occupations	7,310	9.45	N/A
Placer	190	0.25	31
Real Estate Broker	240	0.31	16
Sales Agent, Real Estate	1,080	1.40	12
Sales Agent, Insurance	5,640	7.29	16
All Other Sales Workers	160	0.21	N/A
TOTAL	77,380	100.00	N/A

N/A Relative Error Not Available

Note: May not add to totals due to rounding.

OCCUPATIONS OF EMPLOYEES
SUBDIVIDERS AND DEVELOPERS (SIC 655)

Reference Date May 1978

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	200	15.87	27
Professional Occupations	40	3.17	N/A
Service Occupations	60	4.76	N/A
Janitors, Porters, and Cleaners	30	2.38	46
All Other Service Workers	30	2.38	N/A
Maintenance and Production Occupations	740	58.73	N/A
Maintenance Repairer	50	3.97	40
Gardeners and Grounds Keepers	600	47.62	18
All Other Skilled Workers	80	6.35	N/A
All Other Unskilled Workers	10	0.79	N/A
Clerical Occupations	210	16.67	N/A
Bookkeeper, Hand	50	3.97	40
General Clerk	60	4.76	31
Secretary	40	3.17	46
All Other Clerical Workers	60	4.76	N/A
Sales Occupations	10	0.79	N/A
TOTAL	1,260	100.00	N/A

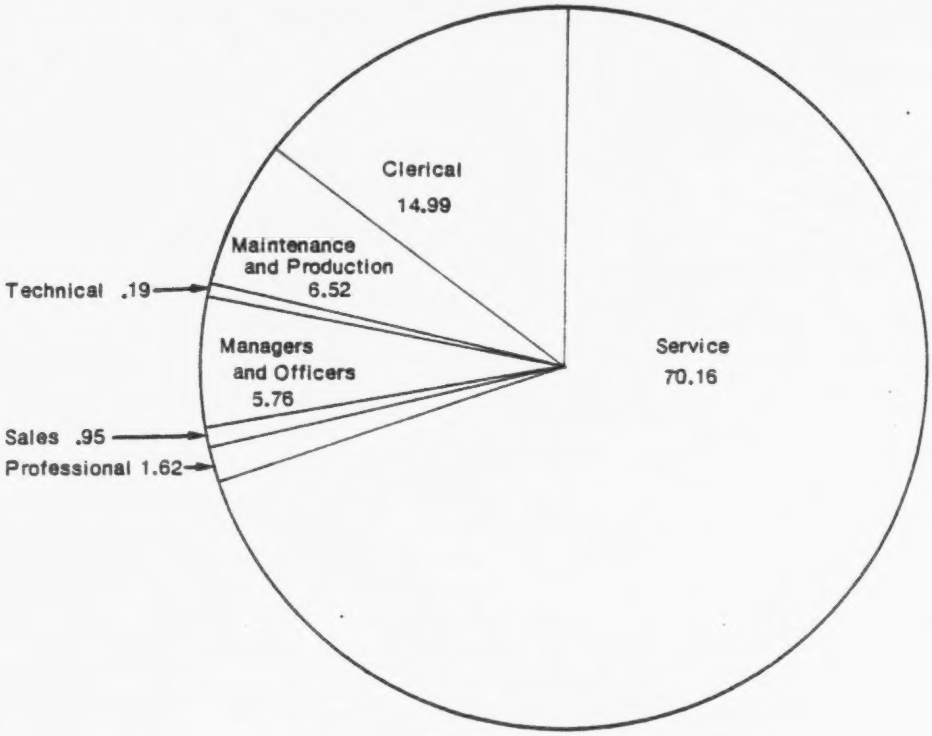
N/A Relative Error Not Available

Note: May not add to totals due to rounding.

HOTELS, ROOMING HOUSES, CAMPS, AND OTHER LODGING PLACES (SIC 70)

This major group includes commercial and institutional establishments engaged in furnishing lodging, or lodging and meals and camping space and camping facilities, on a fee basis.

DISTRIBUTION OF EMPLOYMENT BY MAJOR OCCUPATIONAL CATEGORY



Ranked Occupational Employment

1.	Maid	4,750	6.	House Cleaner	750
2.	Waiter/Waitress	3,750	7.	Dining Room Attendant	700
3.	Managers & Officers	1,210	8.	Bartender	700
4.	Desk Clerk	1,210	9.	Cook, Restaurant	580
5.	Kitchen Helper	1,020	10.	Bellhop	430

These 10 occupations make up 67% of total industry employment

There are over 1000 establishments in this major group with employment of over 23,000 in season. Of this total 13 non-seasonal hotels employ nearly 6000, over twenty-five percent of the total. Employment has been nearly constant, with a variation from year to year of less than three percent. It would appear from the plans and commitments for new construction in this industry, that the growth in employment could be substantial over the next few years.

A comparison of this survey with results of the 1975 survey shows a wide variation both in numbers and in the percent distribution. This variation exists in the major categories as well as in the occupations. It would appear that this current survey's distribution is more reliable, and in particular the major category estimates. The current estimates were based upon a better response rate from the moderate size establishments.

OCCUPATIONS OF EMPLOYEES
HOTELS AND OTHER LODGING PLACES (SIC 70)

Reference Date May 1978

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	1,210	5.76	N/A
Professional Occupations	340	1.62	N/A
Purchasing Agent/Buyer	40	0.19	19
Accountants/Auditors	110	0.52	15
Personnel/Labor Relations Specialist	10	0.05	8
Group Recreation Worker	90	0.43	4
All Other Professional Workers	90	0.43	N/A
Technical Occupations	40	0.19	N/A
Service Occupations	14,740	70.16	N/A
Supervisor, Nonworking Service	160	0.76	12
Maid	4,760	22.66	6
House Cleaner	750	3.57	8
All Other Janitors and Cleaners	220	1.05	14
Guards and Doorkeepers	230	1.09	11
Baker, Bread/Pastry	30	0.14	26
Bartender	690	3.28	7
Dining Room Attendant	700	3.33	10
Butcher/Meat Cutter	10	0.05	33
Host/Hostess, Restaurant	230	1.09	15
Kitchen Helper	1,020	4.85	8
Waiter/Waitress	3,750	17.85	6
Cook, Short Order	110	0.52	26
Cook, Restaurant	580	2.76	9
Food Preparers, Fast Foods	130	0.62	30
Pantry/Sandwich Maker	230	1.09	12
All Other Food Service Workers	30	0.14	32
Bellhop, Porter, Doorkeeper	430	2.05	11
Housekeeper	340	1.62	8
Recreation Facility Attendant	50	0.24	21
Elevator Operator	40	0.19	20
Lifeguard	160	0.76	18
Checkroom/Locker-room Attendant	60	0.29	15
All Other Service Workers	30	0.14	N/A
Maintenance and Production Workers	1,370	6.52	N/A
Washer, Machine/Starcher	70	0.33	15
Laundry Operator	270	1.29	14
Laundry Presser, Machine	10	0.05	14
Carpenter	20	0.10	10
Electrician	10	0.05	10
Inspector	20	0.10	15
Maintenance Repairer	430	2.05	8

SIC 70 (cont.)

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Painter, Maintenance	60	0.29	17
Parking-lot Attendant	70	0.33	26
Gardeners/Groundkeepers	170	0.81	13
All Other Skilled Workers	50	0.24	N/A
All Other Semiskilled Workers	120	0.57	N/A
All Other Unskilled Workers	80	0.38	N/A
Clerical Occupations	3,150	14.99	N/A
Clerical Supervisor	150	0.71	23
Bookkeeping/Billing Machine Operator	20	0.10	28
Accounting Clerk	320	1.52	15
Bookkeeper, Hand	210	1.00	9
Cashier	410	1.95	10
General Clerk	130	0.62	15
Desk Clerk	1,210	5.76	6
Payroll/Timekeeping Clerk	40	0.19	17
Receptionist	40	1.19	10
Secretary	230	1.09	6
Switchboard Operator	230	1.09	15
All Other Office Clerical Workers	50	0.24	N/A
Shipping/Receiving Clerk	20	0.10	23
Stock Clerk, Storeroom	90	0.43	14
Sales Occupations	200	0.95	N/A
Sales Representative	130	0.62	14
Sales Clerk	70	0.33	41
TOTAL	21,010	100.00	N/A

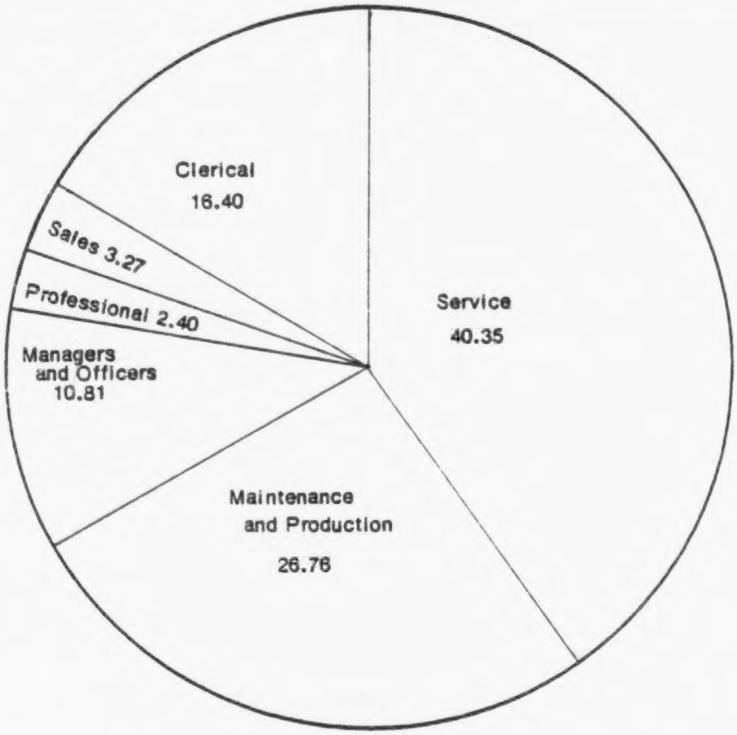
N/A Relative Error Not Available

Note: May not add to totals due to rounding.

PERSONAL SERVICES (SIC 72)

This major group includes establishments primarily engaged in providing services, generally involving the care of the person or his apparel, such as laundries, dry cleaning plants, portrait photographic studios, and beauty and barber shops.

DISTRIBUTION OF EMPLOYMENT BY MAJOR OCCUPATIONAL CATEGORY



Ranked Occupational Employment

1.	Cosmetologist	6,250
2.	Managers & Officers	2,610
3.	Counter Clerk	1,910
4.	Laundry Presser Machine	1,190
5.	Instructor, Reducing	1,050
6.	Delivery/Route Workers	770
7.	Sales Representatives	770
8.	Barber	720
9.	Presser, Machine	700
10.	General Clerk	620

These 10 occupations make up 69% of total industry employment

Of the more than 4700 establishments in this group ninty-six percent employ fewer than 20, and account for nearly sixty-two percent of total employment. Employment from one survey year to the next was almost constant.

As may be expected the diverse nature of this industry group carries over into the occupations. Of the 66 occupations published, 10 occupations account for sixty-nine percent of employment but generally each of these can be identified in a different three or four digit SIC code.

A comparison with the 1975 survey shows a huge increase in the employment of reducing instructors, and some less dramatic changes in other occupations within the same industry. Some other changes appear but seem to be accounted for by the changes in the industry mix within this major group.

OCCUPATIONS OF EMPLOYEES
PERSONAL SERVICES (SIC 72)

Reference Date May 1978

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	2,610	10.81	2
Professional Occupations	580	2.40	N/A
Photographer, Portrait	210	0.87	5
Accountants/Auditors	150	0.62	9
Embalmer	170	0.70	3
All Other Professional Workers	50	0.21	N/A
Service Occupations	9,740	40.35	N/A
Maid	60	0.25	10
All Other Janitors & Cleaners	230	0.95	14
Guards and Doorkeepers	120	0.50	21
Barber	720	2.98	6
Cosmetologist	6,250	25.89	1
Funeral Attendant	260	1.08	3
Manicurist	160	0.66	7
Masseur/Masseuse	430	1.78	18
Scalp Treatment Operator	10	0.04	29
Shampooer	330	1.37	8
Instructor, Reducing	1,050	4.35	10
Mortuary Beautician	20	0.08	9
All Other Service Workers	90	0.37	N/A
Maintenance and Production Occupations	6,460	26.76	N/A
Supervisor, Nonworking	90	0.37	17
Mechanic, Maintenance	20	0.08	23
Laundry-Machine Mechanic	160	0.66	10
Developer/Projection Printer	20	0.08	16
Multiple-Photo-Printer Operator	20	0.08	14
Photo Checker/Assembler	40	0.17	13
Photographer, Helper	20	0.08	16
Marker/Classifier	450	1.86	12
Spotter, Dry Cleaning	70	0.29	14
Spotter, Washable Materials	60	0.25	14
Washer, Machine/Starcher	330	1.37	6
Tumbler Operator	170	0.70	14
Dry Cleaning Machine Operator	210	0.87	9
Dry Cleaner, Hand	40	0.17	22
Laundry Operator	60	0.25	16
Presser, Hand	160	0.66	29
Presser, Machine	700	2.90	7
Laundry Presser Machine Tender	1,190	4.93	8
Rug Cleaner, Hand	20	0.08	22
Rug Cleaner, Machine	90	0.37	26
Shoe Repairer	60	0.25	13
Delivery/Route Worker	770	3.19	8
Folder, Laundry	600	2.49	10
Inspector	240	0.99	11

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Maintenance Repairer	50	0.21	18
Mender	190	0.79	10
Photo Retoucher	30	0.12	15
Production Packager	110	0.46	13
Alteration Tailor	220	0.91	10
Chauffeur	80	0.33	5
All Other Skilled Workers	20	0.08	N/A
All Other Semiskilled Workers	70	0.29	N/A
All Other Unskilled Workers	100	0.41	N/A
Clerical Occupations	3,960	16.40	N/A
Accounting Clerk	20	0.08	8
Bookkeeper, Hand	100	0.41	8
Counter Clerk	1,910	7.91	8
General Clerk	620	2.57	8
Order Clerk	10	0.04	12
Payroll/Timekeeping Clerk	170	0.70	8
Receptionist	480	1.99	4
Secretary	90	0.37	8
Switchboard Operator/Receptionist	20	0.08	10
All Other Office Clerical Workers	270	1.12	N/A
Production Clerk/Co-ordinator	60	0.25	21
Shipping Packer	120	0.50	31
Stock Clerk, Storeroom	90	0.37	22
Sales Occupations	790	3.27	N/A
Sales Representatives	770	3.19	11
Sales Clerk	20	0.08	13
TOTAL	24,140	100.00	N/A

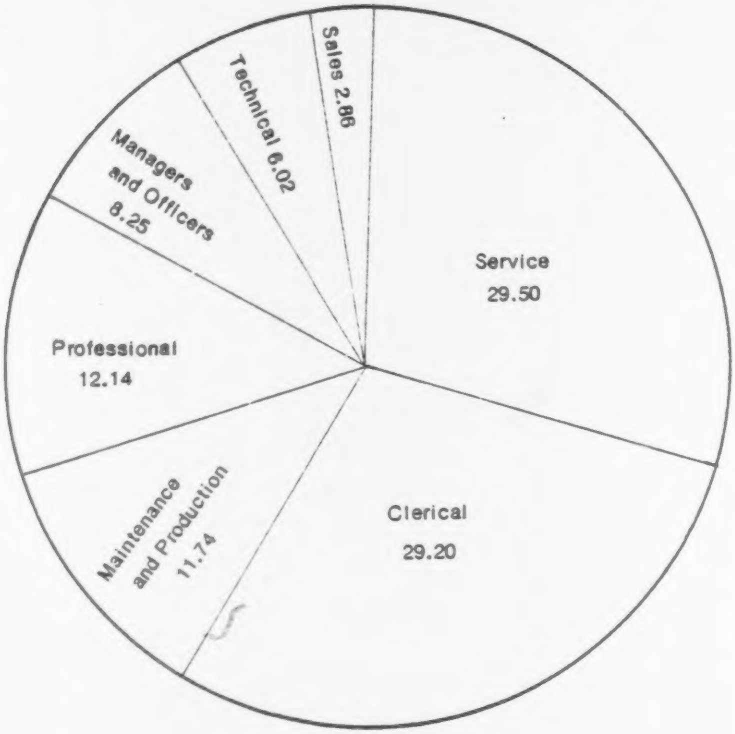
N/A Relative Error Not Available

Note: May not add to totals due to rounding

BUSINESS SERVICES (SIC 73)

This major group includes establishments primarily engaged in rendering services, not elsewhere classified, to business establishments on a fee or contract basis, such as advertising, mailing services; building maintenance services; employment service; management and consulting services; protective services; equipment rental and leasing (except finance leasing); commercial research, development and testing; photofinishing; and personnel supply services.

DISTRIBUTION OF EMPLOYMENT BY MAJOR OCCUPATIONAL CATEGORY



Ranked Occupational Employment

1.	Guards & Doorkeepers	10,310
2.	Managers & Officers	7,380
3.	All Other Janitors and Cleaners	5,320
4.	All Other Service Workers	5,110
5.	All Other Clerical Workers	4,520
6.	Secretary	4,440
7.	Typist	3,980
8.	Truck Driver	3,090
9.	Cleaner, Light	3,070
10.	All Other Professional Workers	3,020

These 10 occupations make up 56% of total industry employment

The diversity and complexity of this major group is best explained by the following table:

Establishments and Employment Distribution

June 1978

SIC		Establishments	Employment
731	Advertising Agencies	360	2,638
732	Consumer Credit Reporting Mercantile, Adjustment and Collection Agencies	134	1,844
733	Mailing, Reproduction, Commercial Art & Photography, and Stenographic Services	317	3,248
734	Service to Dwellings and Other Buildings	755	13,152
735	News Syndicates	9	98
736	Personnel Supply Services	357	19,653
737	Computer and Data Processing Services	518	9,680
739	Miscellaneous Business Services	2380	39,001

Of the 4800 establishments in this group, 4000 employ less than 20 and account for slightly more than twenty percent of total employment. SIC 739 (Miscellaneous Business Services) accounts for fifty percent of the establishments and forty-six percent of employment.

Employment shows a five percent growth from 1975 to 1976, ten percent from 1976 to 1977, and an outstanding increase of twenty percent from 1977 to 1978. The total increase for the period

1975 thru 1978 is nearly 24,000. While the greater part of this increase is attributable to growth some non-economic code changes most certainly played a part.

Most occupations showed growth, particularly Guards, Commercial Artists, Employment Interviewers, Electronic Technicians and Service Workers. Homemakers, Homehealth Aides, non listed occupations, were frequently reported and with substantial employment. The diverse composition of establishments in this group is demonstrated by 130 occupations for which estimates were made.

OCCUPATIONS OF EMPLOYEES
BUSINESS SERVICES (SIC 73)

Reference Date June 1978

OCCUPATIONS	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	7,380	8.25	N/A
Professional Occupations	11,130	12.44	N/A
Electrical/Electronic Engineers	710	0.79	34
Mechanical Engineers	1,090	1.22	28
All Other Engineers	850	0.95	N/A
Psychologist	680	0.76	31
Systems Analyst, Business	750	0.84	17
Systems Analyst, Scientific	890	0.99	17
Accountants/Auditors	780	0.87	13
Media Buyer	90	0.10	6
Commercial Artist	1,020	1.14	15
Writer/Editor	300	0.34	18
Employment Interviewer	730	0.82	21
Media Analyst	50	0.06	9
Public-Relations Practitioner	110	0.12	28
Designer	60	0.07	28
All Other Professional Workers	3,020	3.37	N/A
Technical Occupations	5,390	6.02	N/A
Computer Programmer, Business	1,100	1.23	12
Computer Programmer, Scientific	550	0.61	20
Drafter	660	0.74	25
Electrical/Electronic Technicians	1,330	1.49	26
All Other Technicians	1,750	1.96	N/A
Service Occupations	26,400	29.50	N/A
Cleaner, Heavy	1,820	2.03	12
Cleaner, Light	3,070	3.43	9
Window Washer	100	0.11	22
House Cleaner	670	0.75	17
All Other Janitors, and Cleaners	5,320	5.94	7
Guards and Doorkeepers	10,310	11.52	24
All Other Service Workers	5,110	5.71	N/A
Maintenance and Production Occupations	10,510	11.74	N/A
Supervisor, Nonworking	490	0.55	19
Mechanics and Repairers	240	0.27	N/A
Truck Driver	3,100	3.46	22
Billposter	70	0.08	12
Compositor/Typesetter	100	0.11	23
Delivery/Route Worker	510	0.57	27
Electrician	10	0.01	23
Exterminator	170	0.19	33
Fumigator	50	0.06	33
Machinist	270	0.30	26
Press Operator, Plate Printer	290	0.32	24
Sign Erector	20	0.02	18

SIC 73 (cont.)

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Stationary Boiler Firer	500	0.56	17
Gardeners/Groundskeepers	1,440	1.61	25
All Other Skilled Workers	320	0.36	N/A
All Other Semiskilled Workers	1,190	1.33	N/A
All Other Unskilled Workers	1,740	1.94	N/A
Clerical Occupations	26,130	29.20	N/A
Clerical Supervisor	440	0.49	13
Addressing Machine Operator	540	0.60	28
Bookkeeping/Billing Machine Operator	20	0.20	22
Computer Operator	780	0.87	14
Keypunch Operator	2,350	2.63	15
Inserting/Labeling Machine Operator	220	0.25	28
Duplicating Machine Operator	70	0.08	28
All Other Office Machine Operators	300	0.34	N/A
Stenographer	160	0.18	23
Accounting Clerk	390	0.44	21
Bookkeeper, Hand	540	0.60	13
Collector	590	0.66	26
Media Clerk, Estimator	60	0.07	8
File Clerk	840	0.94	28
General Clerk	2,310	2.58	24
Payroll/Timekeeping Clerk	170	0.19	13
Receptionist	220	0.25	13
Secretary	4,440	4.96	21
Switchboard Operator	1,790	2.00	27
Switchboard Operator/Receptionist	420	0.47	15
Typist	3,980	4.45	19
All Other Office Clerical Workers	4,520	5.05	N/A
Shipping/Receiving Clerk	130	0.15	23
Dispatcher, Vehicle	30	0.03	21
All Other Plant Clerical Workers	820	0.92	N/A
Sales Occupations	2,560	2.86	N/A
Sales Representatives	1,910	2.13	12
All Other Sales Workers	650	0.73	N/A
TOTAL	89,500	100.00	N/A

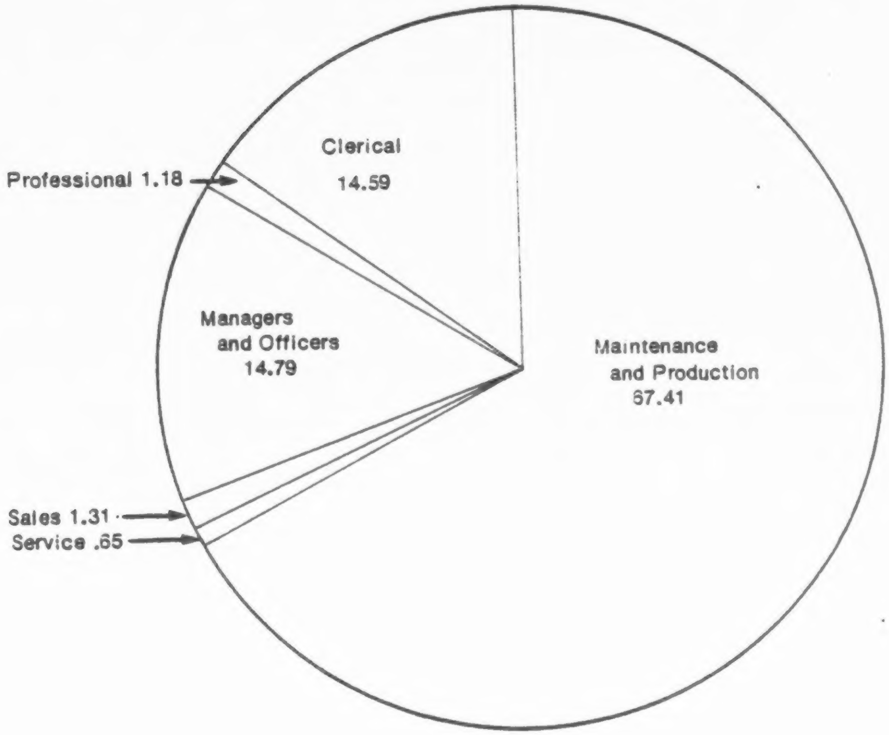
N/A Relative Error Not Available

Note: May not add to totals due to rounding.

AUTO REPAIR, SERVICES, AND GARAGES (SIC 75)

This major group includes establishments primarily engaged in furnishing auto repair, rental, leasing and parking services to the general public.

DISTRIBUTION OF EMPLOYMENT BY MAJOR OCCUPATIONAL CATEGORY



NOTE: Technical workers account for less than .30 of employment.

Ranked Occupational Employment

1.	Mechanic, Automotive	2,940	6.	Parking-lot Attendant	710
2.	Managers & Officers	2,260	7.	Fuel Pump Attendant	590
3.	Body Repairer, Auto	2,060	8.	Cashier	535
4.	Cleaner, Vehicle	1,150	9.	General Clerk	430
5.	Painter, Auto	800	10.	Car Rental Clerk	410

These 10 occupations make up 78% of total industry employment

Of the 2800 establishments in this industry group eighty percent are automobile repair shops employing 10,000, sixty-six percent of the total employment.

As demonstrated by the ranked occupational employment table, the industries have a very basic occupational mix with seventy-eight percent accounted for in these 10 occupations. The remaining employment of 3150 is widely distributed in 31 additional occupations.

The industry growth for the period from 1975 thru 1978 of slightly over 2000 was for the most part distributed between Automotive Mechanic, Auto Body Repairer and Painter.

OCCUPATIONS OF EMPLOYEES
AUTO REPAIR, SERVICES AND GARAGES (SIC 75)

Reference Date May 1978

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	2,260	14.79	3
Professional Occupations	180	1.18	N/A
Accountants/Auditors	150	0.98	8
All Other Professional Workers	30	0.20	N/A
Technical Occupations	10	0.07	N/A
Service Occupations	100	0.65	N/A
Janitors, Porters, and Cleaners	60	0.39	16
Guards and Doorkeepers	40	0.26	34
Maintenance and Production Occupations	10,300	67.41	N/A
Supervisor, Nonworking	240	1.57	7
Mechanic, Automotive	2,940	19.24	4
Body Repairer, Automotive	2,060	13.48	5
Diesel Mechanic	180	1.18	28
Truck Driver	240	1.57	14
Cleaner, Vehicle	1,150	7.53	5
Machinist	150	0.98	16
Maintenance Repairers	80	0.52	14
Helper, Trades	200	1.31	13
Painter, Automotive	800	5.24	7
Parking-Lot Attendant	710	4.65	6
Tire Fabricator/Repairer	30	0.20	27
Welders/Flame Cutters	230	1.51	19
Fuel Pump Attendants	590	3.86	12
Painter, Production	20	0.13	22
Glass Installer, Auto	70	0.46	27
Rental Car Deliverer	250	1.64	10
All Other Semiskilled Workers	260	1.70	N/A
All Other Unskilled Workers	100	0.65	N/A
Clerical Occupations	2,230	14.59	N/A
Accounting Clerk	180	1.18	8
Bookkeeper, Hand	360	2.36	6
Car Rental Clerk	410	2.68	7
Cashier	540	3.53	10
General Clerk	430	2.81	4
Payroll/Timekeeping Clerk	30	0.20	16
Receptionist	60	0.39	14
Secretary	140	0.92	9
Stock Clerk, Storeroom	30	0.20	27
All Other Clerical Workers	50	0.33	N/A

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Sales Occupations	200	1.31	N/A
Sales Representatives	190	1.24	14
All Other Sales Workers	10	0.07	N/A
TOTAL	15,280	100.00	N/A

N/A Relative Error Not Available

Note: May not add to totals due to rounding.

OCCUPATIONS OF EMPLOYEES
AUTO RENTALS, WITHOUT DRIVERS (SIC 751)

Reference Date May 1978

OCCUPATION	EMPLOYMENT Number	Percent	Relative Error Percent
Managers and Officers	370	15.42	22
Professional Occupations	50	2.08	N/A
Technical Occupations	10	0.42	N/A
Service Occupations	10	0.42	N/A
Maintenance and Production Occupations	1,190	49.58	N/A
Mechanic, Automotive	210	8.75	35
Cleaner, Vehicle	240	10.00	34
Fuel Pump Attendant	160	6.67	22
Rental Car Deliverer	250	10.42	31
All Other Skilled Workers	110	4.58	N/A
All Other Semiskilled Workers	220	9.17	N/A
Clerical Occupations	740	30.83	N/A
Car Rental Clerk	410	17.08	23
General Clerk	130	5.42	21
All Other Clerical Workers	200	8.33	N/A
Sales Occupations	30	1.25	N/A
TOTAL	2,400	100.00	N/A

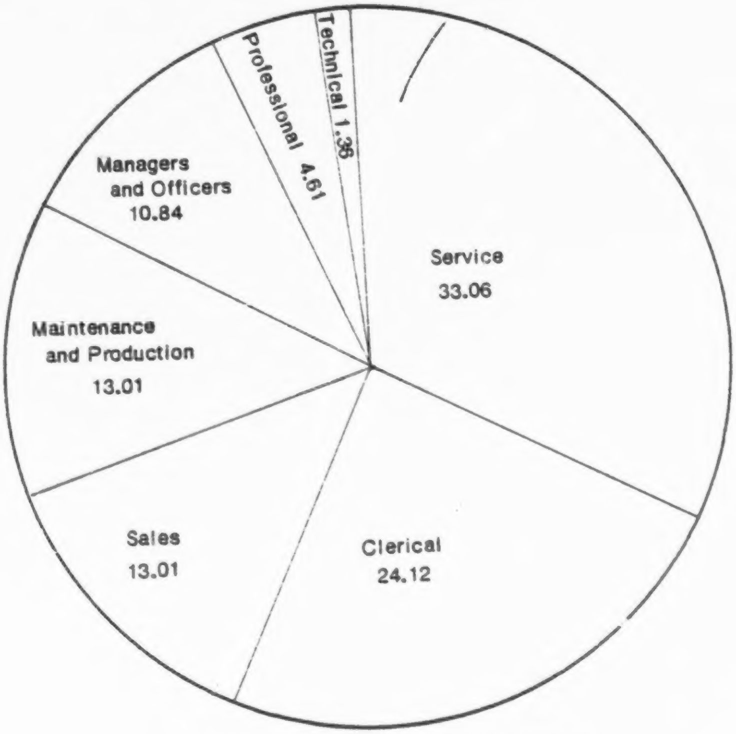
N/A Relative Error Not Available

Note: May not add to totals due to rounding.

MOTION PICTURES (SIC 78)

This major group includes establishments producing and distributing motion pictures, exhibiting motion pictures in commercially operated theaters, and furnishing services to the motion picture industry. The term "motion pictures" includes similar productions for television or other media using film, tape or other means.

DISTRIBUTION OF EMPLOYMENT BY MAJOR OCCUPATIONAL CATEGORY



Ranked Occupational Employment

1.	Usher, Lobby Attendant	820
2.	Cashier	450
3.	Sales Clerk	440
4.	Managers & Officers	400
5.	Motion Picture Projectionist	400
6.	Janitors, Porters, and Cleaners	320
7.	Secretary	110
8.	All Other Office Clerical Workers	90
9.	General Clerk	80
10.	Bookkeeper, Hand	60

These 10 occupations make up 86% of total industry employment

With the exception of the decrease from 1977 to 1978, employment has fluctuated only fractionally. This drop in employment was caused by a non-economic code change in one firm with 10 establishments.

Motion Picture Theaters (SIC 783) account for more than sixty percent of the establishments, and nearly eighty-five percent of total employment.

It is interesting to note that over fifty percent of employment is in occupations that are above the semi-skilled level and only thirty-three percent are in traditionally non-skilled levels. The non-skilled employment is in the part time occupations such as Ushers, Janitors.

While the reference date of this survey was April and the 1975 survey May the occupational distribution has changed only slightly.

OCCUPATIONS OF EMPLOYEES
MOTION PICTURES (SIC 78)

Reference Date April 1978

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	400	10.84	11
Professional Occupations	170	4.61	N/A
Photographer	40	1.08	16
Accountants/Auditors	20	0.54	18
Commercial Artist	30	0.81	15
Film Editor	40	1.08	19
All Other Professional Occupations	40	1.08	N/A
Technical Occupations	50	1.36	N/A
Sound Recording/Reproducing Technician	30	0.81	11
All Other Technicians	20	0.54	N/A
Service Occupations	1,220	33.06	N/A
Janitors, Porters, and Cleaners	320	8.67	7
Guards and Doorkeepers	20	0.54	32
Cook, Short Order	20	0.54	33
Food Preparer, Fast Service	40	1.08	32
Usher, Lobby Attendant	820	22.22	5
Maintenance and Production Occupations	480	13.01	N/A
Developing Machine Operator	20	0.54	39
Film Printer, Motion Picture	20	0.54	39
All Other Darkroom Workers	20	0.54	39
Motion Picture Projectionist	400	10.84	4
All Other Skilled Workers	10	0.27	N/A
All Other Semiskilled Workers	10	0.27	N/A
Clerical Occupations	890	24.12	N/A
Clerical Supervisors	10	0.27	28
Accounting Clerk	20	0.54	8
Bookkeeper, Hand	60	1.63	11
Cashier	460	12.47	3
Film Booker	10	0.27	25
General Clerk	80	2.17	45
Secretary	110	2.98	7
Typist	20	0.54	27
All Other Office Clerical Workers	60	1.63	N/A
Production Clerk/Coordinator	20	0.54	13
Shipping Packer	30	0.81	31
Shipping/Receiving Clerk	10	0.27	20
Sales Occupations	480	13.01	N/A
Sales Representatives	40	1.08	19
Sales Clerks	440	11.92	6
TOTAL	3,690	100.00	N/A

N/A Relative Error Not Available
Note: May not add to totals due to rounding.

OCCUPATIONS OF EMPLOYEES
MOTION PICTURE THEATERS (SIC 783)

Reference Date April 1978

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	320	10.49	14
Professional Occupations	40	1.31	N/A
Service Occupations	1,190	39.02	N/A
Janitors, Porters, and Cleaners	290	9.51	25
Usher, Lobby Attendant	820	26.89	16
All Other Service Workers	80	2.62	N/A
Maintenance and Production Workers	410	13.44	N/A
Motion Picture Projectionist	400	13.11	14
All Other Semiskilled Workers	10	0.33	N/A
Clerical Occupations	660	21.64	N/A
Accounting Clerk	10	0.33	1
Cashier	460	15.08	11
Secretary	50	1.64	48
All Other Clerical Workers	140	4.59	N/A
Sales Occupations	430	14.10	14
TOTAL	3,050	100.00	N/A

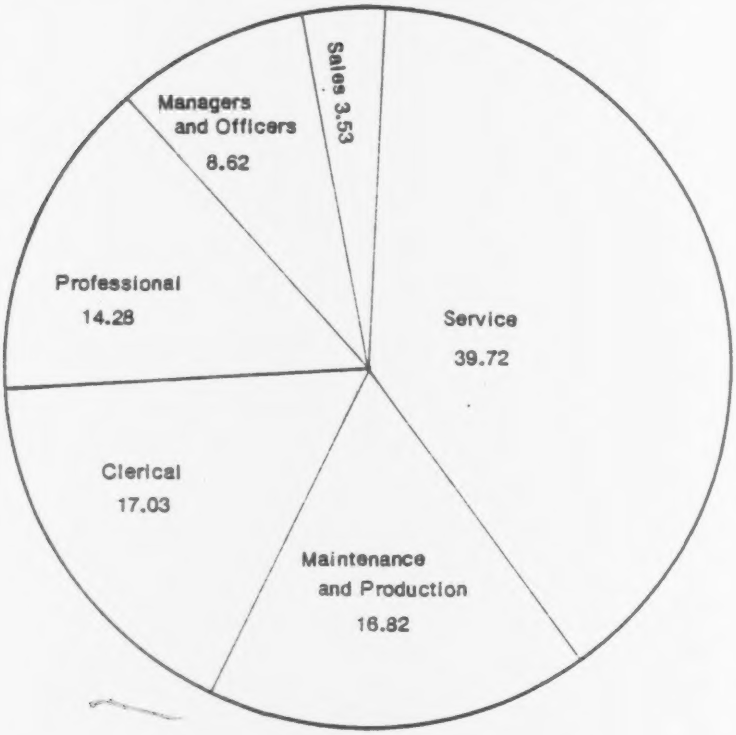
N/A Relative Error Not Available

Note: May not add to totals due to rounding.

AMUSEMENT AND RECREATION SERVICES, EXCEPT MOTION PICTURES (SIC 79)

This major group includes establishments engaged in providing amusement or entertainment on payment of a fee or admission charge, except motion picture theaters.

DISTRIBUTION OF EMPLOYMENT BY MAJOR OCCUPATIONAL CATEGORY



Ranked Occupational Employment

1.	Cashier	1,230
2.	Managers & Officers	1,220
3.	Waiter/Waitress	1,080
4.	Gardeners/Groundkeepers	1,040
5.	Bartender	640
6.	Game/Ride Operator	580
7.	Sports Instructor	550
8.	All Other Janitors	550
9.	Usher/Lobby Attendant	520
10.	All Other Professional Workers	520

These 10 occupations make up 56% of total industry employment

The composition of this Major Group is extremely complex as a whole, but is particularly so when analyzed on a three digit basis. SIC 799(Miscellaneous Amusement and Recreation Service), which accounts for the greatest part of employment in this group, lists nearly one hundred industries, with most being highly seasonal, with a tendency to either the winter or summer months, the latter predominating. This industry includes establishments involved in most outside winter sports as well as golf clubs and beach related activities, all of which are subject to suitable weather conditions. In Massachusetts the survey reference month of April, could or could not, depending on weather conditions include employment in occupations in both winter and summer oriented establishments.

An analysis of the estimates from the 1975 survey compared to those of this survey shows an almost exact comparison in occupations such as Managers and Officers, Waiters and Waitresses, and Groundkeepers. Other occupations such as Cooks and Cashiers show wide discrepancies.

OCCUPATIONS OF EMPLOYEES
AMUSEMENT AND RECREATION SERVICES, EXCEPT MOTION PICTURES (SIC 79)

Reference Date April 1978

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	1,220	8.62	24
Professional Occupations	2,020	14.28	N/A
Accountants/Auditors	80	0.57	9
Athlete, Professional	60	0.42	13
Dance Instructor	360	2.54	2
Public Relations Practitioner	90	0.64	10
Sports Instructor	550	3.89	6
Umpire	20	0.14	16
Group Recreation Worker	340	2.40	13
All Other Professional Workers	520	3.67	N/A
Service Occupations	5,620	39.72	N/A
Supervisor, Nonworking Service	80	0.57	8
Maid	30	0.21	10
All Other Janitors and Cleaners	550	3.89	4
Guards and Doorkeepers	80	0.57	19
Bartender	640	4.52	8
Dining Room Attendant	160	1.13	9
Host/Hostess, Restaurant	30	0.21	9
Kitchen Helper	320	2.26	6
Waiter/Waitress	1,020	7.63	7
Counter Attendant	240	1.70	12
Cook, Short Order	180	1.27	9
Cook, Restaurant	160	1.13	7
All Other Food Service Workers	60	0.42	12
Child Care Attendant	110	0.78	10
Housekeeper	20	0.14	10
Masseur or Masseuse	40	0.28	25
Recreational Facilities Attendant	300	2.12	15
Game/Ride Operators	580	4.10	10
Usher, Lobby Attendant	520	3.67	15
Instructor, Reducing	30	0.21	29
Life-guard	270	1.91	9
Checkroom/Locker Room Attendant	60	0.42	8
All Other Service Workers	80	0.57	N/A
Maintenance and Production Occupations	2,330	16.82	N/A
Supervisor, Nonworking	30	0.21	13
Mechanic, Maintenance	100	0.71	13
Pinsetter Mechanic	70	0.49	14
Coin/Vending Machine Servicer	210	1.48	30
Electrician	20	0.14	19
Maintenance Repairer	310	2.19	9
Parking-Lot Attendant	140	0.99	35

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Animal Caretaker	90	0.64	16
Pin Chaser	140	0.99	12
Gardeners/Groundskeepers	1,040	7.35	5
All Other Skilled Workers	10	0.07	N/A
All Other Semiskilled Workers	70	0.49	N/A
All Other Unskilled Workers	150	1.06	N/A
Clerical Occupations	2,410	17.03	N/A
Clerical Supervisor	30	0.21	9
Accounting Clerk	40	0.28	11
Bookkeeper, Hand	110	0.78	8
Cashier	1,230	8.69	5
Desk Clerk, Bowling	380	2.69	6
General Clerk	210	1.48	9
Payroll/Timekeeping Clerk	50	0.35	13
Receptionist	80	0.57	37
Secretary	210	1.48	23
Switchboard Operator	30	0.21	11
Switchboard Operator/Receptionist	30	0.21	8
All Other Clerical Workers	10	0.07	N/A
Sales Occupations	500	3.53	N/A
Sales Clerks	200	1.41	16
Vendors	40	0.28	26
All Other Sales Workers	260	1.84	N/A
TOTAL	14,150	100.00	N/A

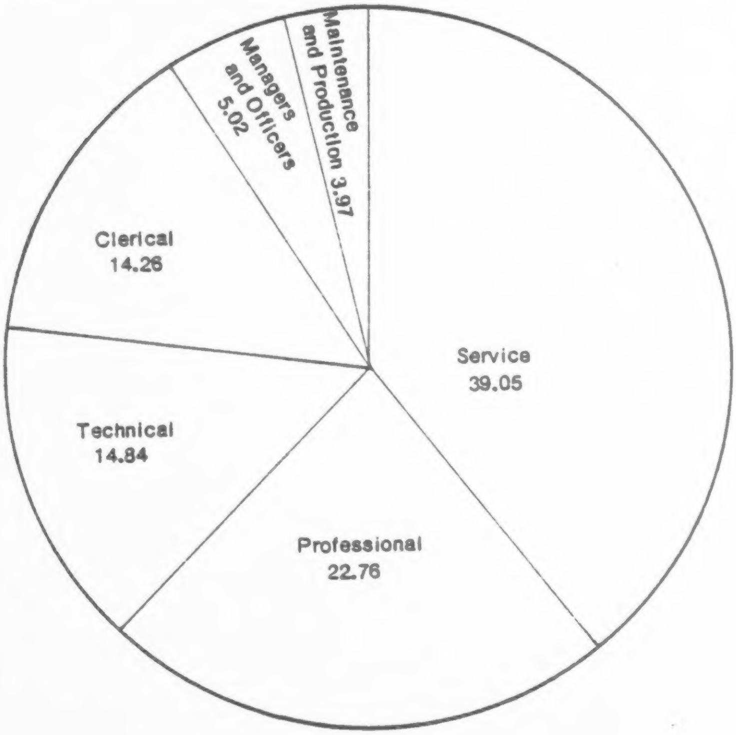
N/A Relative Error Not Available

Note: May not add to totals due to rounding.

HEALTH SERVICES, EXCEPT HOSPITALS (SIC 80), (EXCEPT 806)

This major group includes establishments primarily engaged in furnishing medical, surgical, and other health service to persons. Associations or groups primarily engaged in providing medical or other health services to members are included, but those which limit their services to the provision of insurance against hospitalization or medical costs are classified in Major Group 63.

DISTRIBUTION OF EMPLOYMENT BY MAJOR OCCUPATIONAL CATEGORY



NOTE: Sales workers account for less than .30 of employment.

Ranked Occupational Employment

1.	Nurses Aide/Orderly	18,110
2.	Nurses, Professional	7,040
3.	Physician/Surgeon	4,900
4.	Kitchen Helper	4,900
5.	Licensed Practical Nurse	4,070
6.	Managers & Officers	3,910
7.	Dental Assistant	3,320
8.	Secretary	3,220
9.	Dental Hygienist	1,930
10.	Receptionist	1,840

These 10 occupations make up 66% of total industry employment.

Distribution of Establishments and Employment

by Three Digit SIC

		Establishments	Employment
801	Offices of Physicians	3972	15,000
802	Offices of Dentists	2669	9,187
803	Offices of Osteopaths	17	46
804	Offices of Other Health Practitioners	608	1,448
805	Nursing & Personal Care Facilities	702	41,946
807	Medical & Dental Laboratories	297	3,011
808	Outpatient Care Facilities	107	3,393
809	Health & Allied Services, NEC	130	3,731

Of the more than 8000 establishments in this group employing 77,000, Physicians and Dentists Offices account for seventy-seven percent of the firms but only thirty percent of employment. Average employment per establishment is less than 4. Nursing and Personal Care Facilities while accounting for less than ten-percent of the establishments represent over fifty-percent of employment.

Employment in this group shows a steady upward trend each year with a growth of nearly fifteen percent from 1975 to 1978.

The complexity and diversity of the industries included in this group is best demonstrated by the 75 different occupations for which data was publishable. Changes in the occupational profile from the 1975 survey were numerous and in most cases foreseeable. The occupations showing the greatest changes are Psychologists, Physicians and Surgeons, Medical Lab Technologists and Technicians.

OCCUPATIONS OF EMPLOYEES
HEALTH SERVICES, EXCEPT HOSPITALS (SIC 80), (EXCEPT 806)

Reference Date May 1978

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	3,910	5.02	2
Professional Occupations	17,720	22.76	N/A
Chemist	10	0.01	21
Biological Scientist	10	0.01	19
Psychologist	570	0.73	11
Systems Analyst, E.D.P.	10	0.01	13
Accountants/Auditors	360	0.46	7
Caseworker	610	0.78	5
Dentist	1,680	2.16	2
Dietitian/Nutritionist	360	0.46	4
Nurse, Professional	7,040	9.04	2
Occupational Therapist	310	0.40	6
Optometrist	200	0.26	10
Personnel/Labor Relations Specialist	20	0.03	14
Physical Therapist	440	0.57	8
Physician/Surgeon	4,900	6.29	4
Podiatrist	110	0.14	15
Manual Arts, Music, Recreation Teacher	690	0.89	3
Speech Pathologist/Audiologist	130	0.17	8
Corrective Therapist	20	0.03	17
All Other Professional Workers	250	0.32	N/A
Technical Occupations	11,550	14.84	N/A
Dental Assistant	3,320	4.27	1
Licensed Practical Nurse	4,070	5.23	2
Physicians Assistant	230	0.30	9
Radiologic Technician	280	0.36	9
Dental Hygienist	1,930	2.48	2
Medical Lab Technologist	510	0.66	14
Biochemistry Technologist	110	0.14	24
Microbiology Technologist	30	0.04	15
Cytotechnologist	20	0.03	17
Medical Lab Technician	520	0.67	6
EKG Technician	20	0.03	22
Dietetic Technician	210	0.27	9
Physical Therapy Assistant	140	0.18	8
Radiologic/Nuclear Technologist	100	0.13	14
All Other Technicians	60	0.08	N/A
Service Occupations	30,400	39.05	N/A
Maid	1,080	1.39	5
Other Janitors and Cleaners	1,290	1.66	4
Guards and Doorkeepers	80	0.10	15
Kitchen Helper	4,900	6.29	2
Waiter/Waitress	270	0.35	21
Cook, Institution	1,630	2.09	3

OCCUPATION	EMPLOYMENT Number	Percent	Relative Error Percent
Housekeeper	1,050	1.35	5
Nurses Aide/Orderly	18,110	23.27	1
Social Service Aide	250	0.32	7
Medical Assistants	1,260	1.62	7
All Other Service Workers	480	0.62	N/A
Maintenance and Production Occupations	3,090	3.97	N/A
Washer, Machine/Starcher	940	1.21	3
Laundry Presser, Machine	240	0.31	9
Delivery/Route Worker	290	0.37	10
Maintenance Repairer	890	1.14	4
Dental Lab Technician	450	0.58	12
Optician, Dispensing	110	0.14	17
Gardeners/Groundskeepers	80	0.10	9
All Other Semiskilled Workers	90	0.12	N/A
Clerical Occupations	11,100	14.26	N/A
Clerical Supervisor	580	0.75	5
Bookkeeping/Billing Machine Operator	280	0.36	10
Keypunch Operator	80	0.10	10
All Other Office Machine Operators	30	0.04	N/A
Stenographer	40	0.05	8
Accounting Clerk	150	0.19	16
Bookkeeper, Hand	1,040	1.34	3
Cashier	90	0.12	13
File Clerk	410	0.53	6
General Clerk	1,600	2.06	4
Insurance Clerk	450	0.58	7
Payroll/Timekeeping Clerk	10	0.01	20
Receptionist	1,840	2.36	3
Secretary	3,220	4.14	3
Switchboard Operator	130	0.17	11
Switchboard Operator/Receptionist	230	0.30	7
Typist	740	0.95	6
All Other Office Clerical Workers	90	0.12	N/A
Shipping Packer	60	0.08	1
Shipping/Receiving Clerk	20	0.03	19
All Other Plant Clerical Workers	10	0.01	N/A
Sales Occupations	70	0.09	N/A
TOTAL	77,840	100.00	N/A

N/A Relative Error Not Available

Note: May not add to totals due to rounding.

OCCUPATIONS OF EMPLOYEES
NURSING AND PERSONAL CARE FACILITIES (SIC 805)

Reference Date May 1978

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	1,760	4.19	8
Professional Occupations	6,260	14.92	N/A
Accountants/Auditors	230	0.55	29
Caseworker	280	0.67	17
Dentist	40	0.10	39
Dietician/Nutritionist	330	0.79	14
Nurse, Professional	3,760	8.96	6
Occupational Therapist	230	0.55	22
Optometrist	40	0.10	42
Physical Therapist	180	0.43	15
Physician/Surgeon	370	0.88	47
Podiatrist	50	0.12	46
Manual-Arts, Music,/Recreational Therapist	660	1.57	9
Speech Pathologist/Audiologist	50	0.12	27
All Other Professional Workers	40	0.10	N/A
Technical Occupations	3,900	9.29	N/A
Licensed Practical Nurse	3,610	8.60	7
Dietetic Technician	170	0.41	28
Physical Therapist Assistant	110	0.26	22
All Other Technicians	10	0.02	N/A
Service Occupations	26,920	64.16	N/A
Maid	970	2.31	17
Janitors, Porters, and Cleaners	940	2.24	16
Kitchen Helper	4,880	11.63	6
Cook, Institution	1,610	3.84	11
Housekeeper	980	2.34	17
Nurse Aide,/Orderly	16,750	39.92	3
Social Service Aide	190	0.45	26
All Other Service Workers	600	1.43	N/A
Maintenance and Production Occupations	2,070	4.93	N/A
Washer, Machine/Starcher	940	2.24	9
Laundry Presser, Machine	240	0.57	28
Maintenance Repairer	830	1.98	14
Gardeners/Groundskeeper	60	0.14	30
Clerical Occupations	1,050	2.50	N/A
Clerical Supervisor	70	0.17	40
Bookkeeper, Hand	340	0.81	16
General Clerk	180	0.43	23
Receptionist	110	0.26	22

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Secretary	170	0.41	17
Switchboard Operator/Receptionist	50	0.12	44
Typist	70	0.17	40
All Other Clerical Occupations	60	0.14	N/A
TOTAL	41,960	100.00	N/A

N/A Relative Error Not Available

Note: May not add to totals due to rounding.

OCCUPATIONS OF EMPLOYEES
OUTPATIENT CARE FACILITIES (SIC 808)

Reference Date May 1978

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	260	7.60	9
Professional Occupations	1,480	43.27	N/A
Psychologist	150	4.39	25
Accountants/Auditors	20	0.58	29
Caseworker	280	8.19	24
Dentist	20	0.58	46
Nurse, Professional	420	12.28	12
Optometrist	10	0.29	19
Physician/Surgeon	340	9.94	23
Manual Arts, Music/Recreational Therapist	20	0.58	40
All Other Professional Workers	220	6.43	N/A
Technical Occupations	200	5.85	N/A
Licensed Practical Nurse	100	2.92	18
Radiologic Technician	30	0.88	16
Medical Laboratory Technician	40	1.77	23
All Other Technicians	30	0.88	N/A
Service Occupations	720	21.05	N/A
Maid	30	0.88	32
Janitors, Porters, and Cleaners	50	1.46	22
Nurse Aide/Orderly	220	6.43	31
Social Service Aide	50	1.46	33
Medical Assistant	130	3.80	22
All Other Service Workers	240	7.02	N/A
Maintenance and Production Occupations	20	0.58	N/A
Clerical Occupations	730	21.35	N/A
Clerical Supervisor	40	1.17	26
Keypunch Operators	20	0.58	12
Stenographer	30	0.88	34
Bookkeeper, Hand	80	2.34	16
General Clerk	200	5.84	17
Receptionist	80	2.34	23
Secretary	180	5.26	14
Switchboard Operator	10	0.29	38
Switchboard Operator/Receptionist	20	0.58	22
Typist	60	1.75	32
All Other Clerical Office Workers	10	0.29	N/A
Sales Occupations	10	0.29	N/A
TOTAL	3,420	100.00	N/A

N/A Relative Error Not Available
Note: May not add to totals due to rounding.

OCCUPATIONS OF EMPLOYEES
HEALTH AND ALLIED SERVICES N.E.C. (SIC 809)

Reference Date May 1978

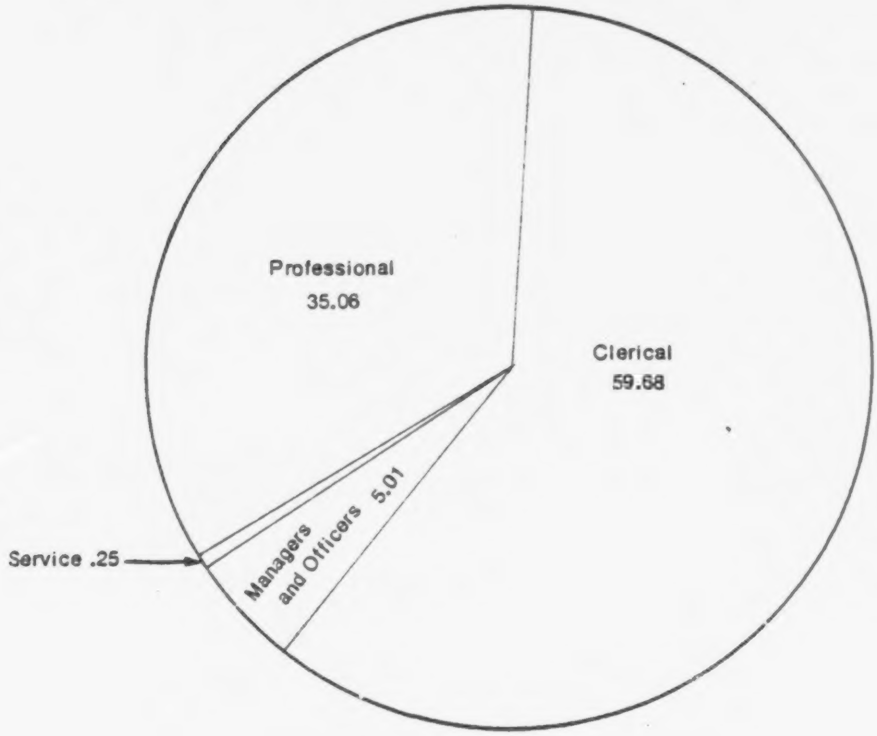
OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	280	7.47	7
Professional Occupations	1,310	34.93	N/A
Accountants/Auditors	20	0.53	30
Nurse, Professional	1,070	28.53	5
Occupational Therapist	20	0.53	28
Physical Therapist	110	2.93	11
Manual Arts, Music/Recreational Therapist	20	0.53	49
Speech Pathologist/Audiologist	20	0.53	26
All Other Professional Workers	50	1.33	N/A
Technical Occupations	170	4.53	N/A
Licensed Practical Nurse	80	2.13	15
Medical Laboratory Technologist	20	0.53	1
Medical Laboratory Technician	30	0.80	1
All Other Technicians	40	1.07	N/A
Service Occupations	1,400	37.33	N/A
Janitors, Porters, and Cleaners	20	0.53	46
Kitchen Helper	20	0.53	22
Cook, Institution	10	0.27	39
Housekeeper	60	1.60	39
Nurse Aide/Orderly	1,120	29.87	7
Social Service Aide	20	0.53	48
All Other Service Workers	150	4.00	N/A
Maintenance and Production Occupations	80	2.13	N/A
Maintenance Repairer	20	0.53	41
Delivery and Route Workers	40	1.07	1
All Other Semiskilled Workers	20	0.53	N/A
Clerical Occupations	500	13.33	N/A
Clerical Supervisor	40	1.07	29
Bookkeeper, Hand	80	2.13	15
General Clerk	90	2.40	15
Receptionist	20	0.53	50
Secretary	70	1.87	19
Switchboard Operator/Receptionist	10	0.27	10
Typist	60	1.60	19
All Other Office Clerical Workers	70	1.87	N/A
All Other Plant Clerical Workers	60	1.60	N/A
Sales Occupations	10	0.27	N/A
TOTAL	3,750	100.00	N/A

N/A Relative Error Not Available
Note: May not add to totals due to rounding.

LEGAL SERVICES (SIC 81)

This major group includes establishments engaged in offering legal advice or legal services the head or heads of which are members of the bar.

DISTRIBUTION OF EMPLOYMENT BY MAJOR OCCUPATIONAL CATEGORY



Ranked Occupational Employment

Rank	Occupation	Employment
1.	Secretary	5,090
2.	Lawyer	2,820
3.	Managers & Officers	600
4.	Paralegal Personnel	580
5.	Law Clerk	530

These 5 occupations make up 80% of total industry employment

Employment, which has shown a small but steady growth from year to year, is concentrated in small establishments. More than seventy-five percent employ three or less and ninety percent employ less than ten.

Lawyers who account for twenty-four percent of employment have a supportive staff of professionals, representing ten percent of employment. Clerical occupations account for almost sixty percent of employment, with secretaries representing forty-two percent. Growth has been evenly distributed in most occupations.

OCCUPATIONS OF EMPLOYEES
LEGAL SERVICES (SIC 81)

Reference Date June 1978

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	600	5.01	5
Professional Occupations	4,200	35.06	N/A
Accountants/Auditors	140	1.17	12
Law Clerk	530	4.42	8
Lawyer	2,820	23.54	2
Librarian, Professional	20	0.17	28
Paralegal Personnel	580	4.84	5
Title Examiner/Abstracter	20	0.17	26
All Other Professional Workers	90	0.75	N/A
Service Occupations	30	0.25	N/A
Clerical Occupations	7,150	59.68	N/A
Bookkeeping/Billing Machine Operator	80	0.67	14
Computer Operator	10	0.08	34
All Other Office Machine Operators	130	1.09	N/A
Stenographer	100	0.83	12
Accounting Clerk	220	1.84	7
Bookkeeper, Hand	350	2.92	6
File Clerk	100	0.83	14
General Clerk	230	1.92	9
Receptionist	140	1.17	7
Secretary	5,090	42.49	1
Switchboard Operator	30	0.25	14
Switchboard Operator/Receptionist	230	1.92	6
Messenger	220	1.84	8
Typist	190	1.59	10
All Other Office Clerical Workers	30	0.25	N/A
TOTAL	11,980	100.00	N/A

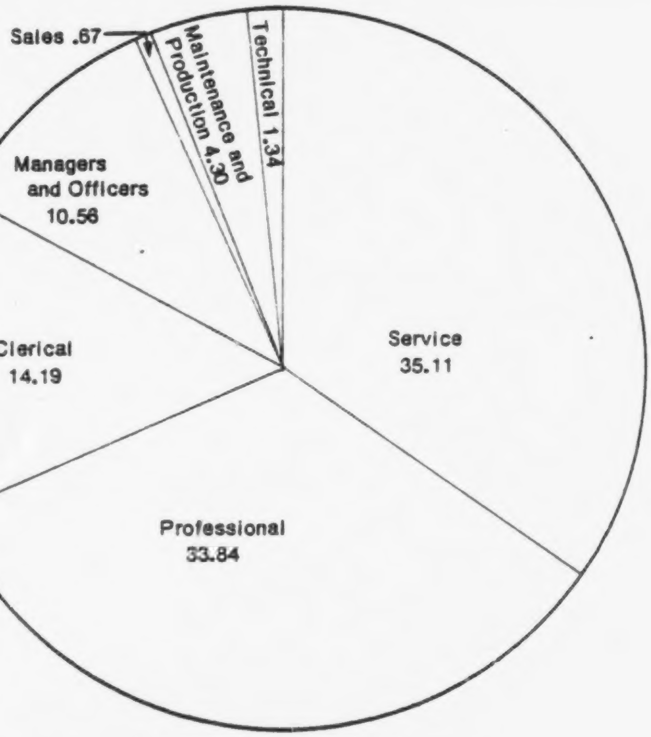
N/A Relative Error Not Available

Note: May not add to totals due to rounding.

SOCIAL SERVICES (SIC 83)

This major group includes establishments providing social services and rehabilitation services to those persons with social or personal problems requiring special services and to the handicapped and the disadvantaged. Also included are organizations soliciting funds to be used directly for these and related services. Establishments primarily engaged in providing Health Services are classified in Major Group 80, Legal Services are classified in Industry 8111, and Educational Services in Major Group 82.

DISTRIBUTION OF EMPLOYMENT BY MAJOR OCCUPATIONAL CATEGORY



Ranked Occupational Employment

1.	Managers & Officers	3,000
2.	All Other Service Workers	2,450
3.	Case Workers	2,390
4.	Child Care Workers	2,250
5.	Teacher, Preschool/ Kindergarten	1,570
6.	Secretary	1,240
7.	Nurse Aide/Orderly	1,210
8.	Group Recreation Worker	1,170
9.	All Other Professional Workers	970
10.	Teacher/Voc. Education	920

These 10 occupations make up 60% of total industry employment

The introduction of the 1972 Standard Industrial Classification which became effective in 1975 caused many changes. SIC 83 was a newly created code, which is made up primarily of establishments formerly in SIC 86. Subsequent to the change, a complete review was made of the coding and the ES 202 employment data was updated. The 1975 survey did not collect data separately for the establishments now covered by this code, but was included in Survey Code 860. Effective January 1, 1978 some establishments in SIC 83 became subject to the Massachusetts Employment Security Law which resulted in an increase in employment. These multiple changes make it impossible to compare the results of the 1975 survey to 1978.

The diversity of the industries included in this group is best demonstrated by the more than seventy five occupations included in our estimates, of which one third are concentrated in the Professional group. Many of these occupations are generally associated with the Health and Education fields.

OCCUPATIONS OF EMPLOYEES
SOCIAL SERVICES (SIC 83)

Reference Date May 1978

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	3,000	10.56	2
Professional Occupations	9,610	33.84	N/A
Psychologist	100	0.35	13
Teacher, Preschool/Kindergarten	1,570	5.53	2
Teacher, Vocational Education	920	3.24	21
Teacher, Non Vocational	200	0.70	15
Vocational/Educational Counselor	570	2.01	11
All Other Teachers	250	0.88	12
Purchasing Agent/Buyer	60	0.21	22
Accountants/Auditors	190	0.67	5
Budget Analyst	70	0.25	19
Director, Camp	30	0.11	21
Case Worker	2,390	8.42	4
Clergy	20	0.07	21
Dietitian/Nutritionist	120	0.42	21
Lawyer	20	0.07	15
Nurse, Professional	380	1.34	5
Occupational Therapist	20	0.07	15
Physical Therapist	40	0.14	15
Public Relations Practitioner	80	0.28	10
Director of Religious Activities	10	0.04	29
Community Organization Workers	360	1.27	7
All Other Therapists	30	0.11	11
Group Recreation Workers	1,170	4.12	7
Manual Arts/Music/Recreation Therapists	40	0.14	28
All Other Professional Workers	970	3.42	N/A
Technical Occupations	380	1.34	N/A
Computer Programmer	10	0.04	24
Licensed Practical Nurse	350	1.23	8
All Other Technicians	20	0.07	N/A
Service Occupations	9,970	35.11	N/A
Supervisor, Nonworking Service	270	0.95	10
House Cleaner	310	1.09	7
All Other Janitors and Cleaners	640	2.25	4
Guards and Doorkeepers	50	0.18	17
Baker, Bread/Pastry	20	0.07	2
Dining Room Attendant	170	0.60	10
Kitchen Helper	300	1.06	4
Waiter/Waitress	100	0.35	21
Cook, Institution	460	1.62	6
Child Care Attendant	710	2.50	8
Housekeeper	10	0.04	13
Nurse Aide/Orderly	1,210	4.26	5
Maid	200	0.70	14

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Child-Care Worker	2,250	7.92	5
Social Service Aide	810	2.85	10
Medical Assistant	10	0.04	22
All Other Service Workers	2,450	8.63	N/A
Maintenance and Production Occupations	1,220	4.30	N/A
Supervisor, Nonworking	120	0.42	19
Marker/Classifier, Wash	30	0.11	10
Washer, Machine/Starcher	60	0.21	9
Laundry, Presser, Machine	20	0.07	26
Truck Driver	60	0.21	23
Bus Driver	30	0.11	13
Carpenter	30	0.11	10
Delivery/Route Worker	20	0.07	20
Maintenance Repairer	240	0.85	5
Painter, Maintenance	20	0.07	18
Stationary Boiler Firer	10	0.04	29
Gardeners/Groundskeepers	30	0.11	19
Bus Driver, School	80	0.28	6
All Other Skilled Workers	20	0.07	N/A
All Other Semiskilled Workers	250	0.88	N/A
All Other Unskilled Workers	200	0.70	N/A
Clerical Occupations	4,030	14.19	N/A
Clerical Supervisor	150	0.53	7
Bookkeeping/Billing Machine Operator	110	0.39	9
Keypunch Operator	30	0.11	23
Accounting Clerk	140	0.49	7
Bookkeeper, Hand	360	1.27	4
File Clerk	30	0.11	14
General Clerk	500	1.76	5
Payroll/Timekeeping Clerk	50	0.18	13
Personnel Clerk	70	0.25	16
Procurement Clerk	10	0.04	24
Receptionist	170	0.60	8
Secretary	1,240	4.37	4
Switchboard Operator	20	0.07	8
Switchboard Operator/Receptionist	150	0.53	8
Typist	310	1.09	7
Teacher Aide	570	2.01	4
All Other Office Clerical Workers	100	0.35	N/A
Shipping/Receiving Clerk	10	0.04	38
All Other Plant Clerical Workers	10	0.04	N/A

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Sales Occupations	190	0.67	N/A
Contributions Solicitors	50	0.18	23
Sales Clerks	10	0.04	17
All Other Sales Workers	130	0.46	30
TOTAL	28,400	100.00	N/A

N/A Relative Error Not Available

Note: May not add to totals due to rounding.

OCCUPATIONS OF EMPLOYEES
INDIVIDUAL AND FAMILY SOCIAL SERVICES (SIC 832)

Reference Date May 1978

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	970	10.45	10
Professional Occupations	3,230	34.81	N/A
Vocational/Educational Counselor	130	1.40	30
All Other Teachers	180	1.94	N/A
Accountants/Auditors	80	0.86	21
Case Worker	1,470	15.84	14
Dietician/Nutritionist	20	0.22	29
Community Organization Worker	210	2.26	28
Group Recreation Workers	490	5.28	20
All Other Professional Workers	650	7.00	N/A
Technical Occupations	30	0.32	N/A
Service Occupations	3,620	39.01	N/A
Janitors, Porters, and Cleaners	140	1.51	30
Kitchen Helper	20	0.22	35
Cook, Institution	30	0.32	34
Child Care Worker	430	4.63	27
All Other Service Workers	3,000	32.33	N/A
Maintenance and Production Occupations	220	2.37	N/A
Clerical Occupations	1,180	12.72	N/A
Bookkeeping, Billing Machine Operator	40	0.43	32
Accounting Clerk	50	0.54	32
Bookkeeper, Hand	110	1.19	21
Receptionist	70	0.75	33
Secretary	420	4.53	14
Switchboard Operator, Receptionist	70	0.75	26
Typist	110	1.19	26
All Other Clerical Workers	310	3.34	N/A
Sales Occupations	30	0.32	N/A
TOTAL	9,280	100.00	N/A

N/A Relative Error Not Available

Note: May not add to totals due to rounding.

OCCUPATIONS OF EMPLOYEES
RESIDENTIAL CARE (SIC 836)

Reference Date May 1978

OCCUPATION	EMPLOYMENT Number	Percent	Relative Error Percent
Managers and Officers	360	6.35	18
Professional Occupations	990	17.46	N/A
Accountants/Auditors	40	0.71	49
Nurse, Professional	240	4.23	15
Physical Therapist	10	0.18	17
All Other Professional Workers	700	12.35	N/A
Technical Occupations	310	5.47	N/A
Service Occupations	3,190	56.26	N/A
Maid	200	3.53	45
House Cleaner	110	1.94	33
Janitors, Porters, and Cleaners	110	1.94	21
Baker, Bread/Pastry	20	0.35	7
Dining Room Attendant	140	2.47	37
Kitchen Helper	230	4.06	16
Cook, Institution	270	4.76	29
Nurse Aide/Orderly	950	16.75	16
Child-Care Worker	480	8.47	42
Social Service Aide	70	1.23	39
All Other Service Workers	610	10.76	N/A
Maintenance and Production Occupations	350	6.17	N/A
Marker, Classifier, Laundry	30	0.53	32
Washer, Machine	60	1.06	28
Maintenance Repairer	140	2.47	21
All Other Skilled Workers	30	0.53	N/A
All Other Semiskilled Workers	90	1.59	N/A
Clerical Occupations	470	8.29	N/A
Bookkeeper, Hand	60	1.06	39
General Clerk	100	1.76	39
Personnel Clerk	10	0.18	23
Secretary	120	2.12	33
All Other Clerical Workers	180	3.17	N/A
TOTAL	5,670	100.00	N/A

N/A Relative Error Not Available

Note: May not add to totals due to rounding.

OCCUPATIONS OF EMPLOYEES
SOCIAL SERVICES N.E.C. (SIC 839)

Reference Date May 1978

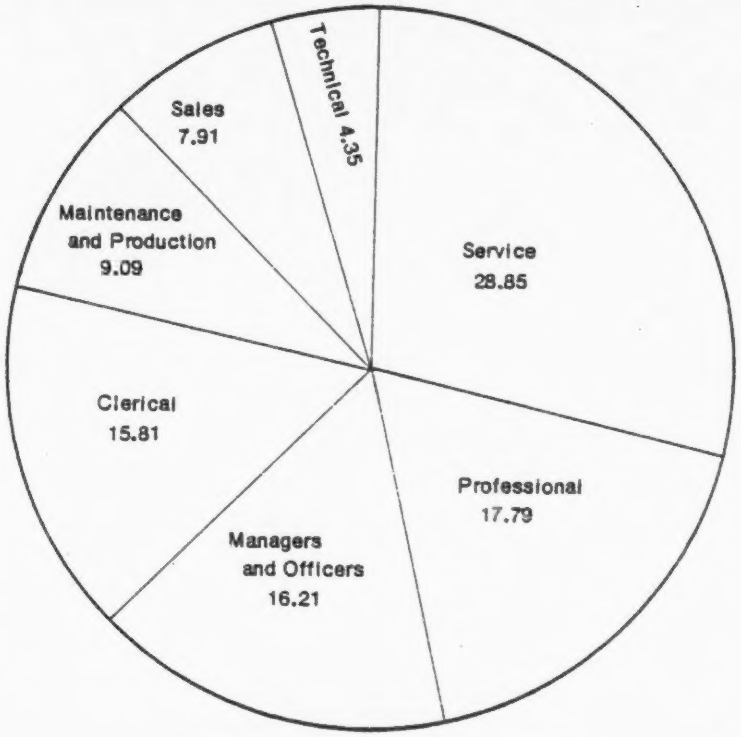
OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	990	13.87	N/A
Professional Occupations	2,210	30.95	N/A
Psychologist	20	0.28	27
Teacher, Pre-school/Kindergarten	10	0.14	14
Vocational/Educational Counselor	190	2.66	24
All Other Teachers	140	1.96	N/A
Accountants/Auditors	40	0.56	35
Case Worker	590	8.26	28
Occupational Therapist	20	0.28	48
Community Organization Worker	120	1.68	29
All Other Therapists	30	0.42	N/A
Group Recreation Worker	580	8.12	41
All Other Professional Workers	470	6.58	N/A
Technical Occupations	40	0.56	N/A
Service Occupations	2,050	28.71	N/A
Janitors, Porters, & Cleaners	210	2.94	24
Child Care Attendant	220	3.08	17
Child Care Worker	830	11.62	32
Social Service Aide	260	3.64	27
House Cleaner	30	0.42	42
All Other Service Workers	500	7.00	N/A
Maintenance & Production Occupations	400	5.60	N/A
Supervisor, Nonworking	20	0.28	6
Bus Driver	20	0.28	15
Carpenter	20	0.28	14
Maintenance Repairer	60	0.84	31
All Other Semiskilled Workers	160	2.24	N/A
All Other Unskilled Workers	120	1.68	N/A
Clerical Occupations	1,400	19.61	N/A
Clerical Supervisor	90	1.26	17
Bookkeeping/Billing Machine Operator	60	0.84	42
Accounting Clerk	60	0.84	34
Bookkeeper, Hand	100	1.40	28
General Clerk	260	3.64	24
Receptionist	50	0.70	43
Secretary	490	6.86	19
Typist	120	1.68	32
All Other Clerical Workers	170	2.38	N/A
Sales Occupations	50	0.70	N/A
TOTAL	7,140	100.00	N/A

N/A Relative Error Not Available
Note: May not add to totals due to rounding

MUSEUMS, ART GALLERIES, BOTANICAL AND ZOOLOGICAL GARDENS (SIC 84)

This major group includes museums, art galleries, and botanical and zoological gardens, which are not operated commercially. Receipts or funding of these establishments are not primarily from admission charges. These establishments are of historical, educational or cultural interest.

DISTRIBUTION OF EMPLOYMENT BY MAJOR OCCUPATIONAL CATEGORY



Ranked Occupational Employment

1.	Managers & Officers	410
2.	Guide, Sightseeing	350
3.	Guards & Doorkeepers	230
4.	Teacher, Nonvocational	200
5.	Secretary	130

These 5 occupations make up 52% of total industry employment

While employment in this group is relatively small its contribution to the overall economy is important. Massachusetts, and in particular the Boston area, has been known for its historical, educational, and cultural institutions. This asset continues to attract visitors by the thousands who have contributed to the employment growth of over thirty percent in this industry since 1975. The real value of this industry is the side effect it has on hotels, restaurants, shops and numerous other establishments associated with tourists.

The occupational profile has changed considerably since the 1975 survey. Most growth has been distributed between Managers and Officers, Teachers, Museum Curators and Technicians.

Caution is advised in comparing the 1975 profile against 1978 because of a change in the reference month from June to April. June employment is higher because of seasonal factors and is reflected in service and maintenance occupations.

OCCUPATIONS OF EMPLOYEES
MUSEUMS, ART GALLERIES, BOTANICAL & ZOOLOGICAL GARDENS (SIC 84)

Reference Date April 1978

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	410	16.21	3
Professional Occupations	450	17.79	N/A
Teacher/Instructor, Nonvocational	200	7.91	7
Librarian, Professional	40	1.58	10
Curator, Museum	80	3.16	5
Designer	30	1.19	4
All Other Professional Workers	100	3.95	N/A
Technical Occupations	110	4.35	N/A
Museum Technician/Restorer	80	3.16	7
Technical Assistant Library	30	1.19	9
Service Occupations	730	28.85	N/A
Janitors, Porters, Cleaners	110	4.35	9
Guards and Doorkeepers	230	9.09	6
Food Service Workers	40	1.58	8
Guide, Sightseeing	350	13.83	10
Maintenance and Production Occupations	230	9.09	N/A
Carpenter	20	0.79	6
Maintenance Repairer	100	3.95	4
Helper, Trades	30	1.19	13
Painter, Maintenance	10	0.40	29
Animal Caretaker	30	1.19	4
Gardeners/Groundskeepers	40	1.58	11
Clerical Occupations	400	15.81	N/A
Accounting Clerk	20	0.79	10
Bookkeeper, Hand	40	1.58	6
Cashier	40	1.58	8
General Clerk	70	2.77	6
Library Assistant	30	1.19	24
Receptionist	20	0.79	16
Secretary	130	5.14	4
Switchboard Operator/Receptionist	30	1.19	14
Typist	10	0.40	12
All Other Clerical Occupations	10	0.40	N/A
Sales Occupations	200	7.91	N/A
Sales Representative	70	2.77	5
Sales Clerk	130	5.14	8
TOTAL	2,530	100.00	N/A

N/A Relative Error Not Available

Note: May not add to totals due to rounding.

OCCUPATIONS OF EMPLOYEES
MUSEUMS AND ART GALLERIES (SIC 841)

Reference Date April 1978

OCCUPATION	EMPLOYMENT Number	EMPLOYMENT Percent	EMPLOYMENT Relative Error Percent
Managers and Officers	400	17.17	11
Professional Occupations	400	17.17	N/A
Teacher/Instructor, Nonvocational	180	7.73	25
Librarian, Professional	40	1.72	32
Curator, Museum	70	3.00	16
Designer	30	1.29	19
All Other Professional Workers	80	3.43	N/A
Technical Occupations	110	4.72	N/A
Museum Technician/Restorer	80	3.43	23
Technical Assistant, Library	30	1.29	29
Service Occupations	690	29.61	N/A
Janitors, Porters, and Cleaners	100	4.29	31
Guards and Doorkeepers	220	9.44	19
Food Service Workers	30	1.29	29
Guide, Sightseeing	340	14.59	31
Maintenance and Production Occupations	160	6.87	N/A
Carpenter	20	0.86	20
Maintenance Repairer	70	3.00	15
Helper, Trades	30	1.29	43
Gardeners/Groundskeepers	20	0.86	42
All Other Skilled Workers	20	0.86	N/A
Clerical Occupations	370	15.88	N/A
Accounting Clerk	20	0.86	33
Bookkeeper, Hand	40	1.72	21
Cashier	30	1.29	36
General Clerk	60	2.58	22
Receptionist	20	0.86	50
Secretary	120	5.15	13
Switchboard Operator/Receptionist	30	1.29	47
Typist	10	0.43	43
All Other Clerical Workers	40	1.72	N/A
Sales Occupations	200	8.58	N/A
Sales Representatives	70	3.00	17
Sales Clerks	130	5.58	26
TOTAL	2,330	100.00	N/A

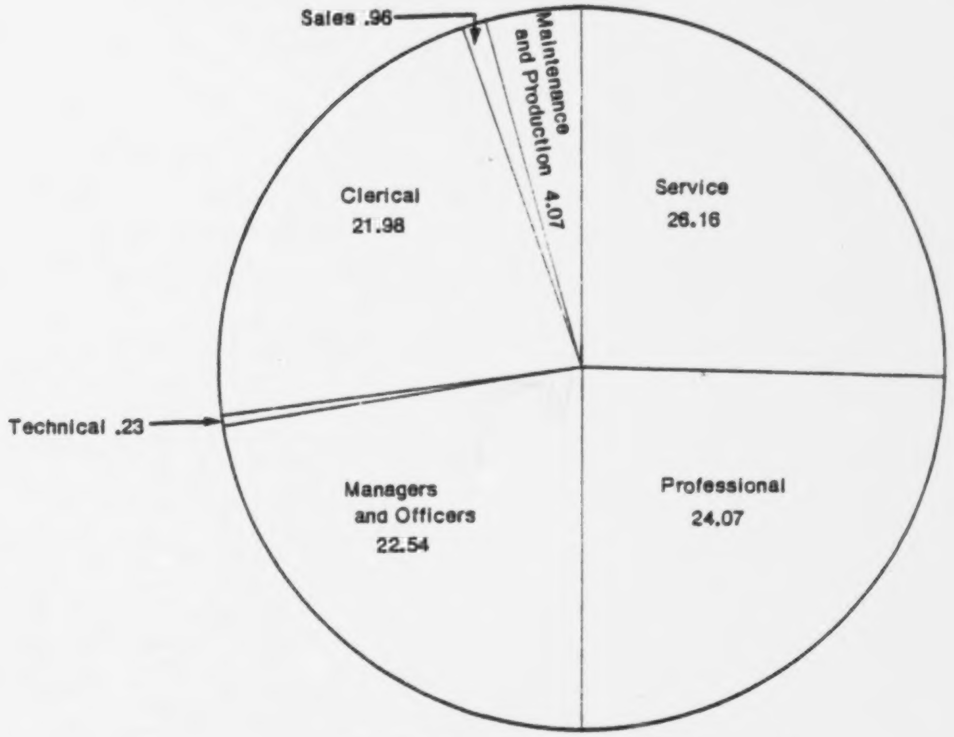
N/A Relative Error Not Available

Note: May not add to totals due to rounding.

MEMBERSHIP ORGANIZATIONS (SIC 86)

This major group includes organizations operating on a membership basis for the promotion of the interests of the members. Included are such as trade associations; professional membership organizations; labor unions and similar labor organizations; and political and religious organizations.

DISTRIBUTION OF EMPLOYMENT BY MAJOR OCCUPATIONAL CATEGORY



Ranked Occupational Employment

1.	Managers & Officers	3,990
2.	Group Recreation Worker	1,580
3.	Bartender	1,480
4.	Secretary	970
5.	All Other Service Workers	790
6.	All Other Professional Workers	660
7.	All Other Janitors & Cleaners	630
8.	General Clerk	630
9.	Bookkeeper, Hand	470
10.	Waiter/Waitress	400

These 10 occupations make up 62% of total industry employment

Distribution of Establishments and Employment by Three Digit SIC

		Establishments	Employment
861	Business Associations	238	1,278
862	Professional Membership Organizations	100	979
863	Labor Unions & Similar Organizations	604	3,409
864	Civic, Social and Fraternal Associations	1129	10,506
865	Political Organizations	42	102
866	Religious Organizations	20	437
869	Membership Organizations NEC	83	1,062

Of the more than 2000 establishments in this group eighty-five percent employ less than 10 and account for less than thirty percent of employment.

With the exception of SIC 861 and 862, which account for only thirteen percent of employment, many of the occupations are of a part time nature and a great many are elective and merely pay an annual or monthly stipend.

As was explained in SIC 83 it is impossible to compare this survey with that conducted in 1975 because of the SIC manual changes and other non-economic adjustments.

OCCUPATIONS OF EMPLOYEES
MEMBERSHIP ORGANIZATIONS (SIC 86)

Reference Date April 1978

OCCUPATION	EMPLOYMENT Number	Percent	Relative Error Percent
Managers and Officers	3,990	22.54	3
Professional Occupations	4,260	24.07	N/A
Engineers	40	0.23	26
Statisticians	20	0.11	17
All Other Physical Scientists	10	0.06	35
Teacher, Preschool/Kingergarten	50	0.28	10
Teacher/Instructor, Vocational Education	290	1.64	18
Teacher/Instructor, Nonvocational Education	70	0.40	32
All Other Teachers	360	2.03	29
Accountants/Auditors	120	0.68	8
Director, Camp	70	0.40	17
Caseworker	220	1.24	13
Writer/Editor	170	0.96	9
Lawyer	10	0.06	24
Musician, Instrumental	60	0.34	20
Nurse, Professional	70	0.40	9
Personnel/Labor Relations Specialist	280	1.58	12
Public-Relations Practitioner	70	0.40	8
Community Organization Worker	110	0.62	12
Group Recreation Worker	1,580	8.93	7
All Other Professional Workers	660	3.73	N/A
Technical Occupations	40	0.23	N/A
Licensed Practical Nurse	30	0.17	16
All Other Technicians	10	0.06	N/A
Service Occupations	4,630	26.16	N/A
Supervisor, Nonworking Service	70	0.40	11
Maid	170	0.96	14
All Other Janitors and Cleaners	630	3.56	4
Guards and Doorkeepers	90	0.51	12
Bartender	1,480	8.36	7
Dining Room Attendant	70	0.40	15
Kitchen Helper	130	0.73	13
Waiter/Waitress	400	2.26	14
Cook, Restaurant	110	0.62	15
Cook, Institution	20	0.11	16
Nurse Aide/Orderly	140	0.79	17
Recreational Facility Attendant	120	0.68	20
Child-Care Worker	230	1.30	14
Social Service Aide	180	1.02	18
All Other Service Workers	790	4.46	N/A

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Maintenance and Production Occupations	720	4.07	N/A
Laundry Operator	10	0.06	14
Bus Driver	190	1.07	29
Delivery/Route Workers	10	0.06	18
Maintenance Repairer	190	1.07	7
Animal Caretaker	60	0.34	6
All Other Skilled Workers	40	0.23	N/A
All Other Semiskilled Workers	110	0.62	N/A
All Other Unskilled Workers	110	0.62	N/A
Clerical Occupations	3,890	21.98	N/A
Computer Operator	30	0.17	12
Keypunch Operator	40	0.23	30
All Other Office Machine Operators	20	0.11	20
Stenographer	60	0.34	13
Accounting Clerk	180	1.02	9
Bookkeeper, Hand	470	2.66	3
Cashier	60	0.34	21
File Clerk	60	0.34	13
General Clerk	630	3.56	6
Mail Clerk	40	0.23	11
Payroll/Timekeeping Clerk	60	0.34	9
Receptionist	250	1.41	10
Secretary	970	5.48	3
Switchboard Operator	30	0.17	16
Switchboard Operator/Receptionist	170	0.96	8
Travel Counselor, Auto	50	0.28	3
Typist	320	1.81	6
Teacher Aide	300	1.69	10
All Other Office Clerical Workers	90	0.51	14
Stock Clerk, Storeroom	60	0.34	11
Sales Occupations	170	0.96	N/A
Contributions Solicitors	100	0.56	11
All Other Sales Workers	70	0.40	9
TOTAL	17,700	100.00	N/A

N/A Relative Error Not Available

Note: May not add to totals due to rounding.

OCCUPATIONS OF EMPLOYEES
MEMBERSHIP ORGANIZATIONS N.E.C. (SIC 869)

Reference Date June 1978

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	140	12.96	8
Professional Organizations	160	14.81	N/A
Writers/Editors	20	1.85	30
Nurse, Professional	20	1.85	1
All Other Professional Workers	120	11.11	N/A
Technical Occupations	10	0.93	N/A
Service Occupations	300	27.78	N/A
Janitors, Porters, and Cleaners	30	2.78	38
Dining Room Attendant	10	0.93	1
Kitchen Helper	10	0.93	1
Nurse Aide/Orderly	60	5.56	1
Child-Care Worker	10	0.93	1
All Other Service Workers	180	16.67	N/A
Maintenance and Production Occupations	100	9.26	N/A
Maintenance Repairer	20	1.85	7
Animal Caretaker	60	5.56	21
All Other Skilled Workers	10	0.93	N/A
All Other Semiskilled Workers	10	0.93	N/A
Clerical Occupations	330	30.56	N/A
Accounting Clerk	20	1.85	33
Bookkeeper, Hand	40	3.70	17
General Clerk	50	4.63	28
Payroll/Timekeeping Clerk	10	0.93	41
Secretary	40	3.70	18
Travel Counselor	50	4.63	6
Typist	40	3.70	38
Teacher Aide	10	0.93	41
Stock Clerk, Storeroom	10	0.93	49
All Other Clerical Workers	60	5.56	N/A
Sales Occupations	40	3.70	N/A
Contributions Solicitor	10	0.93	17
All Other Sales Workers	30	2.78	16
TOTAL	1,080	100.00	N/A

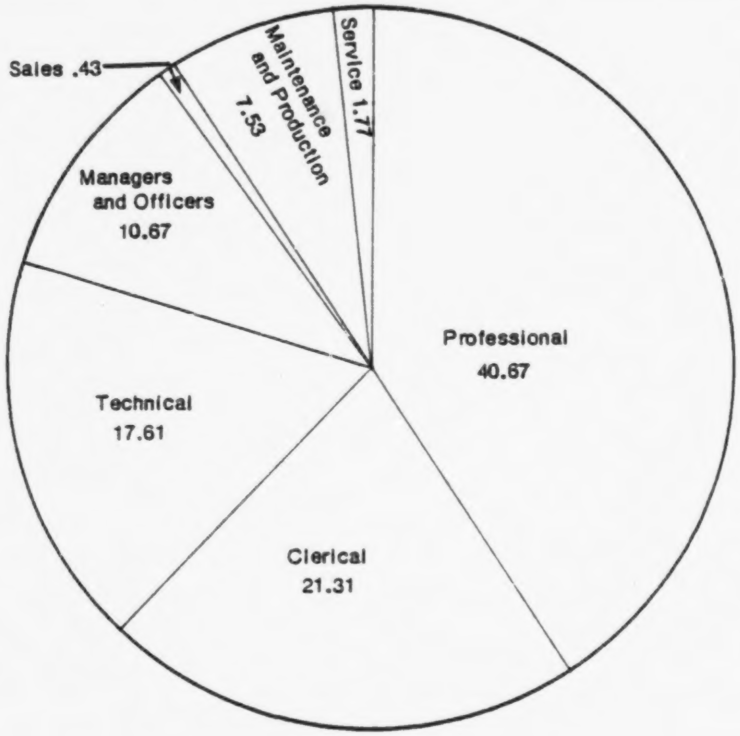
N/A Relative Error Not Available

Note: May not add to totals due to rounding.

MISCELLANEOUS SERVICES (SIC 89)

This major group includes establishments engaged in performing services not elsewhere classified, such as those rendered by engineers, architects, accountants, artists, lecturers, and writers. This major group also includes noncommercial establishments primarily engaged in educational scientific, and research activities.

DISTRIBUTION OF EMPLOYMENT BY MAJOR OCCUPATIONAL CATEGORY



Ranked Occupational Employment

1.	Managers & Officers	3,980	6.	All Other Professional Workers	1,900
2.	Accountants/Auditors	3,810	7.	Electrical/Electronic Engineer	1,280
3.	Drafter	2,870	8.	All Other Engineers	1,180
4.	Secretary	2,260	9.	Surveyor Helper	1,100
5.	Civil Engineer	2,010	10.	Typist	1,100

These 10 occupations make up 57% of total industry employment

Distribution of Employment and Establishments by Three Digit SIC

		Establishments	Employment
891	Engineering, Architectural, and Surveying Services	1036	21,964
892	Noncommercial Educational, Scientific, and Research Organizations	137	7,587
893	Accounting, Auditing and Bookkeeping Services	969	7,319
899	Services, NEC	72	358

Of the more than 2200 establishments in this group 14 account for over forty percent of employment and nearly 1800 employ only twelve percent. The concentration of large establishments is in Engineering, Architectural and Surveying Services, with Accounting, Auditing and Bookkeeping Services having a majority of the smaller firms.

Non-economic SIC changes, both in and out of this group, have distorted the employment trends. Discounting these changes, employment continues to increase at more than five percent each year.

The occupational profile shows that the professional category accounts for over forty percent of employment, (largest within scope of survey) which is more than the technical and clerical combined. Since the 1975 survey, one large establishment with employment of over 4500 was shifted from the construction industry to this group. This change of one establishment, with a high concentration of professional workers, has made it impossible to compare the profiles from one survey to another.

OCCUPATIONS OF EMPLOYEES
MISCELLANEOUS SERVICES (SIC 89)

Reference Date June 1978

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	3,980	10.67	5
Professional Occupations	15,170	40.67	N/A
Chemical Engineer	220	0.57	8
Civil Engineer	2,010	5.39	4
Electrical/Electronic Engineer	1,280	3.43	25
Industrial Engineer	150	0.40	8
Mechanical Engineer	1,050	2.82	12
Metallurgist/Metallurgical Engineer	30	0.08	6
Safety Engineer	170	0.46	16
All Other Engineers	1,180	3.16	N/A
Actuary	80	0.21	20
Statistician	30	0.08	16
All Other Physical Scientists	540	1.45	N/A
Market-Research Analyst	20	0.05	26
Psychologist	10	0.03	13
Systems Analyst, Business	260	0.70	13
Systems Analyst, Scientific	210	0.56	21
Photographer	20	0.05	28
Purchasing Agent/Buyer	200	0.54	5
Accountants/Auditors	3,810	10.21	4
Landscape Architect	80	0.21	11
Architect	610	1.64	8
Commercial Artist	120	0.32	8
Cost Estimator	410	1.10	4
Writer/Editor	210	0.56	19
Lawyer	20	0.05	18
Librarian, Professional	50	0.13	24
Personnel/Labor Relations Specialist	100	0.27	9
Designer	220	0.59	15
Tax Preparer	180	0.48	13
All Other Professional Workers	1,900	5.09	N/A
Technical Occupations	6,570	17.61	N/A
Computer Programmer, Business	250	0.67	13
Computer Programmer, Scientific	270	0.72	9
Drafter	2,870	7.69	2
Electrical/Electronic Technician	600	1.61	26
Surveyor	580	1.55	7
Specification Writer	40	0.11	6
Civil Engineering Technician	800	2.14	5
All Other Engineering Technicians	480	1.29	14
All Other Technicians	680	1.82	N/A
Service Occupations	660	1.77	N/A
Janitors, Porters, and Cleaners	360	0.97	13
Guards and Doorkeepers	140	0.38	21
All Other Service Workers	160	0.43	N/A

SIC 89 (cont.)

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Maintenance and Production Occupations	2,810	7.53	N/A
Mechanic, Maintenance	30	0.08	26
Blueprinting Machine Operator	80	0.21	6
Carpenter	130	0.35	14
Electrician	70	0.19	16
Inspector	190	0.51	26
Machinist	140	0.38	22
Maintenance Repairer	90	0.24	16
Helper, Trades	20	0.05	28
Plumber/Pipefitter	50	0.13	16
Surveyor Helper	1,100	2.95	8
All Other Skilled Workers	420	1.13	N/A
All Other Semiskilled Workers	380	1.02	N/A
All Other Unskilled Workers	110	0.29	N/A
Clerical Occupations	7,950	21.31	N/A
Clerical Supervisor	260	0.70	10
Bookkeeping/Billing Machine Operator	20	0.05	27
Computer Operator	200	0.54	8
Keypunch Operator	170	0.46	18
Peripheral E.D.P. Equipment Operator	20	0.05	14
All Other Office Equipment Operators	250	0.67	5
Stenographer	110	0.29	6
Accounting Clerk	420	1.13	8
Bookkeeper, Hand	470	1.26	6
File Clerk	230	0.62	4
General Clerk	890	2.39	8
Mail Clerk	210	0.56	17
Payroll/Timekeeping Clerk	70	0.19	9
Personnel Clerk	40	0.11	23
Receptionist	80	0.21	11
Secretary	2,260	6.06	4
Statistical Clerk	130	0.35	34
Switchboard Operator	40	0.11	10
Switchboard Operator/Receptionist	190	0.51	9
Messenger	120	0.32	12
Typist	1,000	2.68	8
Proofreader, Clerical	90	0.24	15
All Other Office Clerical Workers	430	1.15	N/A
Production Clerk/Coordinator	60	0.16	12
Shipping/Receiving Clerk	70	0.19	22
Stockclerk, Storeroom	80	0.21	34
All Other Plant Clerical Workers	40	0.11	N/A
Sales Occupations	160	0.43	N/A
Sales Representatives	140	0.38	9
All Other Sales Workers	20	0.05	N/A
TOTAL	37,300	100.00	N/A

N/A Relative Error Not Available

Note: May not add to totals due to rounding.

OCCUPATIONS OF EMPLOYEES
ENGINEERING, ARCHITECTURE, AND SURVEYING SERVICES (SIC 891)

Reference Date June 1978

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Managers and Officers	2,140	9.73	6
Professional Occupations	8,090	36.77	N/A
Chemical Engineer	210	0.95	23
Civil Engineer	2,010	9.14	13
Electrical/Electronic Engineer	910	4.14	12
Industrial Engineer	150	0.68	26
Mechanical Engineer	890	4.05	14
Metallurgist/Metallurgical Engineer	30	0.14	19
Safety Engineer	140	0.64	10
All Other Engineers	830	3.77	N/A
Mathematician	10	0.05	41
Chemist	20	0.09	27
Geologist/Geophysicist	30	0.14	22
Oceanographer	30	0.14	39
Physicist	20	0.09	30
All Other Physical Scientists	30	0.14	14
Market Research Analyst	10	0.05	13
Psychologist	10	0.05	43
Systems Analyst, Business	120	0.55	20
Systems Analyst, Scientific	140	0.64	30
Purchasing Agent/Buyer	170	0.77	13
Accountants/Auditors	200	0.91	17
Landscape Architect	80	0.36	33
Architect	610	2.77	26
Commercial Artist	40	0.18	12
Cost Estimator	410	1.86	11
Writer/Editor	120	0.55	22
Lawyer	20	0.09	8
Librarian, Professional	20	0.09	9
Personnel/Labor Relations Specialist	70	0.32	8
Designer	220	1.00	47
All Other Professional Workers	540	2.45	N/A
Technical Occupations	5,330	24.23	N/A
Computer Programmer, Business	130	0.59	22
Computer Programmer, Scientific	200	0.91	21
Drafter	2,870	13.05	8
Electrical/Electronic Technician	280	1.27	19
Surveyor	580	2.64	23
Specification Writer	40	0.18	19
Civil Engineering Technician	800	3.64	14
All Other Engineering Technicians	310	1.41	32
Physical Science Technician	20	0.09	47
All Other Technicians	100	0.45	N/A

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Service Occupations	130	0.59	N/A
Janitors, Porters, and Cleaners	90	0.41	30
Guards and Doorkeepers	30	0.14	24
All Other Service Workers	10	0.05	N/A
Maintenance and Production Occupations	2,330	10.59	N/A
Supervisor, Nonworking	50	0.23	33
Mechanic, Maintenance	20	0.09	44
Blueprinting Machine Operator	80	0.36	20
Carpenter	100	0.45	39
Electrician	40	0.18	38
Machinist	80	0.36	30
Maintenance Repairer	80	0.36	37
Plumber/Pipefitter	40	0.18	40
Surveyor Helper	1,100	5.00	24
All Other Skilled Workers	210	0.95	N/A
All Other Semiskilled Workers	430	1.95	N/A
All Other Unskilled Workers	100	0.45	N/A
Clerical Occupations	3,860	17.55	N/A
Clerical Supervisor	130	0.59	13
Computer Operator	70	0.32	9
Keypunch Operator	70	0.32	7
Peripheral EDP Equipment Operator	10	0.05	22
All Other Office Machine Operators	200	0.91	N/A
Stenographer	90	0.41	19
Accounting Clerk	140	0.64	9
Bookkeeper, Hand	310	1.41	15
File Clerk	190	0.86	6
General Clerk	460	2.09	12
Mail Clerk	110	0.50	8
Payroll/Timekeeping Clerk	60	0.27	16
Personnel Clerk	10	0.05	17
Receptionist	60	0.27	42
Secretary	1,060	4.82	9
Statistical Clerk	50	0.23	5
Switchboard Operator	30	0.14	12
Switchboard Operator/Receptionist	100	0.45	35
Messenger	70	0.32	20
Typist	400	1.82	11
Proofreader, Clerical	30	0.14	7
All Other Office Clerical Workers	50	0.23	N/A
Production Clerk/Co-ordinator	50	0.23	20
Shipping/Receiving Clerk	50	0.23	31
Stockclerk, Storeroom	20	0.09	23
All Other Plant Clerical Workers	40	0.18	35

SIC 891 (cont.)

OCCUPATION	EMPLOYMENT		
	Number	Percent	Relative Error Percent
Sales Occupations	120	0.55	N/A
TOTAL	22,000	100.00	N/A

N/A Relative Error Not Available

Note: May not add to totals due to rounding.

Occupational Profiles published by the Massachusetts Division of Employment Security.

1971	Manufacturing 1/
1973	Non-Manufacturing 1/
1973	Wholesale and Retail Trade 1/
1974	Manufacturing 1/
1975	Selected Federal - State and Local Government
1976	Wholesale and Retail Trade
1976	Trucking, Warehousing and Air Transportation
1977	Selected Manufacturing Industries

1/ Out of Print

Write to:
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Massachusetts Division of Employment Security
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Government Center,
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